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ABSTRACT

A career education program in the Newark, Delaware, School District is in the process of developing and implementing a K-12 instructional system utilizing a three phase approach: Awareness Phase (K-5), emphasizing career awareness and positive work attitudes; Exploration Phase (6-8), exploring career clusters; Exploration Specialization Phase (9-12), emphasizing in-depth career cluster exploration and specialized skill development. Program goals, objectives, procedures, evaluation, descriptions, results, and accomplishments are presented. Curriculum development has been individualized by school and teacher, with pilot testing. Community orientation has been wide spread and successful. Appendixes take up the bulk of the document and include: (A) supplementary program material and the February, 1974 report "Goals and Recommendations for Implementation of Career Education in the Newark School District, K-12, 36 pages, which describes the three educational phases in terms of their rationale, goals, implementation, program development, and organizational approach and includes a curriculum guide for the Awareness and Exploration phases; (B) lists of project participants and units written and piloted by district teachers and the curriculum development format; (C) the script of a sound slide presentation; (D) a list of advisory council members. (LH)

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INTERIM REPORT

Project No. V0001VW
Grant No. OEG-0-74-0955

The Career Education Instructional System

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

H. Nelson Freidly, Jr.
Newark School District Board of Education
83 East Main Street
Newark, Delaware 19711

December, 1974

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The project reported herein was performed pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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INTERIM REPORT SUMMARY

Period Covered
January 2, 1974 to January 1, 1975

Goals and Objectives:

A. Given the opportunity, time and funding necessary for continued involvement of the total community (business, industry, education, parents, and students) in the ongoing development of the Career Education Instructional System, community participants will be able to:

   1. Provide advisory services through participation as members of the Career Education Project Advisory Council.

   2. Directly participate in program development by serving as members of elementary, middle, and high school Career Education Ad Hoc Committees.

   3. Serve as resource consultants to career program development teams and career related classroom activities.

B. Given the opportunity, time and funding necessary for continued development and implementation of a kindergarten through grade twelve Career Education Instructional System, project participants will be able to:

   1. Develop guidelines for career related curriculum development at the elementary, middle, and high school levels.

   2. Develop career related programs to be implemented at the elementary, middle, and high school levels. These programs will include: (a) performance objectives, (b) student activities, and (c) academic-vocational interdisciplinary approaches.

C. Given the opportunity, time and funding necessary to maximize distribution of Career Education Instructional System information, project coordinators and participants will be able to:

   1. Prepare sufficient copies of prepared materials for dissemination.

2. Disseminate prepared information through the Newark School District and the State Department of Public Instruction.

3. Provide technical assistance to new project participants.

Procedures:

The K-12 career program in the Newark School District provides for three major areas of emphasis: (1) community interaction; (2) curriculum development; and (3) field testing.

Community interaction has occurred via the establishment of an advisory council, curriculum task forces, and classroom activity participation. The advisory council is composed of educators and representatives from the community, business and industry. It provides overall direction and recommends career education policy to the superintendent and Board of Education. Three task forces, whose composition was similar to that of the advisory council, developed comprehensive goals and recommendations for implementing career education in the district.

School and teacher volunteers have been identified for the purpose of developing curriculum that included one or more of the concepts of youth activities, interdisciplinary procedures, the career theme, and performance objectives. The materials we developed according to the organizational and philosophical pattern of each school resulting in alternative materials for each grade level.

Materials developed by each volunteer teacher are field tested by that teacher during the current school year. Follow-up to the field test experience will include refinement and editing for the purpose of eventual packaging and limited dissemination.

Results and Accomplishments:

Teacher and student involvement in project activities has been significant. Summer inservice and training sessions have directly involved about sixty district teachers in curriculum development efforts. Curriculum materials have been developed and are currently being field tested in six elementary, three middle and three high schools.

Community involvement in the advisory council, task forces, and school activities has exceeded expectations. Interest by business and industry and the demands being generated by the educational community has resulted in a cooperative funding effort by the Newark School District and the DuPont Company to establish an agency for the purpose of coordinating school-community interaction. A project outcome of this agency is a comprehensive community resource document.

Evaluation:

Third party evaluation is being conducted by Educational Testing Service of Princeton, New Jersey. Dr. Raymond Wasdyke is the senior program officer. ETS reports indicate the management objectives outlined in the proposal are being accomplished satisfactorily. The extensive procedures outlined in the guidelines for securing a third party evaluator delayed the identification of this agency for approximately six months which has hampered the overall first year evaluation effort.

The U.S.O.E. evaluation was also concluded satisfactorily resulting in a recommendation for second year funding.

Conclusions and Recommendations:

Community involvement, support, and interest has been surprising and is occurring more rapidly than anticipated. Greater emphasis needs to be placed in this area to take advantage of the opportunities provided by the community.

Concentrated orientation efforts are now beginning to overcome the confusion that persist as both educators and the lay public attempt to distinguish between career and vocational education. This confusion is still extensive and orientation efforts should continue.

Teachers react very favorably to developing curriculum materials for their schools and classrooms rather than from a district point of view.

New guidelines for evaluating Part D career education projects raises questions concerning their applicability to projects with varying emphasis such as developmental, implementational, research and/or exemplary. A close and ongoing monitoring of evaluation activities involving OE, project directors, and third party evaluators should occur.

BODY OF THE REPORT

I. Problem

Students, parents, business leaders, and school personnel are observing a growing gap between theoretical knowledge and the application of this knowledge in society. Students appear to be unable to correlate academic programs to the world outside the classroom. As a result, national statistics indicate that approximately 2 1/2 million young people per year are casualties of the educational process. These students are high school dropouts, college dropouts, and participants in "general" programs in the high school, and enter the job market with little or no training in an era when the need for unskilled workers is diminishing rapidly.

New educational strategies are needed which correlate educational activities with career opportunities. Educational programs must be developed which focus basic academic subjects around a career development theme. These programs must develop a positive work ethic, provide for career exploration activities, and appropriate career specialization.

The school cannot exist separate from the "real world." The total community must demonstrate serious involvement in both program development and program implementation. The resultant program would be one that would emphasize the dignity of work, provide for increased exploration of career opportunities, provide the student with a greater understanding of himself, and provide for career specialization as career decisions are made.

References:

Bivens Manpower Needs Study:	It indicates manpower needs in New Castle County, Delaware. It also cites career areas with oversupply of trained manpower and career areas with a shortage of manpower.
National Statistics:	Department of Labor and U. S. Office of Education statistics indicating high dropout rates, over-emphasis on college preparatory training, and the great number of unskilled workers entering the labor force.
Ohio Vocational Interest Survey (OVIS):	Survey indicating the need for correlation of vocational and basic programs.

II. Goals and Objectives of the Project

The goals and objectives as stated in the proposal still represent the basic management goals of the project in the Newark School District.

A. Goals as Stated in the Proposal

1. Given the opportunity, time and funding necessary for continued involvement of the total community (business, industry, education, parents, and students) in the on-going development of the Career Education Instructional System, community participants will be able to:

    a. Provide advisory services through participation as members of the Career Education Project Advisory Council.

    b. Directly participate in program development by serving as members of elementary, middle and high school Career Education Ad Hoc Committees.

    c. Serve as resource consultants to career program development teams and career related classroom activities.

2. Given the opportunity, time and funding necessary for continued development and implementation of a kindergarten through grade twelve Career Education Instructional System, project participants will be able to:

    a. Develop guidelines for career related curriculum devleopment at the elementary, middle, and high school levels.

    b. Develop career related programs to be implemented at the elementary, middle, and high school levels. These programs will include: (a) performance objectives, (b) student activities, (c) academic-vocational interdisciplinary approaches.

3. Given the opportunity, time and funding necessary to maximize distribution of Career Education Instructional System information, project coordinators and participants will be able to:

    a. Prepare sufficient copies of prepared materials for dissemination.

    b. Disseminate prepared information through the Newark School District and the State Department of Public Instruction.

c. Provide technical assistance to new project participants.

These management goals provide overall direction to the project staff; there was a need to identify the goals and objectives of a comprehensive district program in career education. These goals are stated in terms of student expectations and it is within this framework that project activities occur. The following definition and goals have been submitted to the Newark Board of Education:

Definition

Career education is a comprehensive educational goal designed to provide all youth the opportunity for career awareness, and the opportunity to attain skills necessary to achieve economic independence and an appreciation of the dignity of work.

Elementary (Awareness)

GOAL 1: To develop in pupils positive attitudes about the personal and social significance of work.

SUBGOALS: To develop in pupils an awareness that:

1. The society in which we live is dependent upon people working.
2. Rewards and satisfaction can result when people work.
3. There are rules for all kinds of work.
4. All kinds of work are interdependent and should benefit both the individual and society.
5. Attitudes and personality factors have an effect on work, performance, and success.
6. Work has dignity and is worthwhile.
7. Work involves the production of either goods or services.

GOAL 2: To develop each pupil's self-awareness.

SUBGOALS: To develop in pupils an awareness that:

1. All people have dignity and are worthwhile.
2. People have differing abilities, values, attitudes, and interests.
3. Occupations differ in their requirements and prospects.
4. Understanding and accepting oneself is a continuing developmental process which is influenced by experiences throughout life.
5. Each person assumes several different roles in relation to the people and situations with which he comes in contact.

GOAL 3: To develop and expand the occupational awareness and occupational aspirations of the pupils.

SUBGOALS: To develop in pupils an awareness that:

1. Some skill or training is necessary for all career choices.
2. All people can and should contribute their talents and capabilities to career or avocational endeavors.
3. People need to adapt to technological and sociological changes which create or eliminate work.
4. Environmental and cultural factors determine the kinds of career choices available.
5. A man's career affects his way of life.

GOAL 4: To improve overall pupil performance by unifying and focusing basic subjects around a career development theme.

SUBGOALS: To develop in pupils an awareness that:

1. All kinds of work need basic skills and training.
2. Skills developed through basic subject materials can lead to an enjoyment of both work and leisure activities.
3. Acquisition of fundamental competencies is necessary for future skill development.
4. Communication skills developed through basic subjects can lead to better interaction and job understanding.
5. Successful learning experiences in basic subject areas are fundamental to achieving career interests and making adequate decisions.
6. Variety in depth and types of skill development effects interdependency among people.

Middle (Exploration)

GOAL 1: To provide experiences for students to assist them in evaluating their interests, abilities, values and needs as they relate to occupational roles.

SUBGOALS: The student should be able to:

1. Engage in a variety of hands-on-experiences--a "creative activity, a designing activity, or a construction activity."
2. Experience success in his career activities.
3. Develop interpersonal skills through participation in a variety of grouping situations.

4. Make both positive and negative choices to help him discover his likes and dislikes.
5. Discuss his interests and abilities with a teacher or guidance counselor, based upon the results of interest inventories, aptitude tests, and other appropriate information.
6. Justify his career choices according to available evidence.
7. Recognize the social, economic, and personal importance of work.
8. Display a positive attitude toward work.
9. Practice the desirable habits that are required in the world of work (e.g., promptness, attendance).
10. Acquire possible life-long avocational choices or hobbies.

GOAL 2: To provide students with opportunities for further and more detailed exploration of selected occupational clusters, leading to the tentative selection of a particular cluster for indepth exploration.

SUBGOALS: The student should be able to:

1. Investigate careers within the fifteen job clusters.
2. Select his own tentative career choices and/or career courses.
3. Consider the consequences of his career choices.
4. Investigate career alternatives existing within the community.
5. Recognize national and world-wide career opportunities.
6. Examine the characteristics and requirements of different careers (e.g., working conditions, educational and personal requirements, employment possibilities, socioeconomic status and life style).
7. Compare occupations in specific clusters with regard to their range, nature and relatedness.
8. Compile information about a specific career or occupation.
9. Distinguish between the professional, technical, and non-technical levels of careers.
10. Recognize the necessity for adaptability in a constantly changing technological society.

GOAL 3: To improve the performance of students in basic subject areas by making the subject matter more meaningful and relevant through unifying and focusing it around a career development theme.

SUBGOALS: The student should be able to:

1. Demonstrate effective communication skills.
2. Demonstrate basic numerical skills.
3. Demonstrate manual-perceptual skills.
4. Engage in problem-solving and decision-making.
5. Develop effective work and study habits.
6. Develop consumer skills.
7. Describe the need for basic educational skills in the world of work.
8. Discuss the relevance of base subjects to future career possibilities.

Secondary (Exploration and Specialization)

GOAL 1: To provide indepth exploration and training in one occupational cluster leading to entry-level skill in one educational area and providing a foundation for further progress, leaving open the option to move between clusters if desired.

GOAL 2: To improve the performance of students in basic subject areas by making the subject matter more meaningful and relevant through unifying and focusing it around a career development theme.

GOAL 3: To provide guidance and counseling for the purpose of assisting students in selecting an occupational specialty with the following options: intensive job preparation, preparation for post secondary occupational programs, or preparation for a four-year college.

GOAL 4: To provide every student intensive preparation in a selected occupational cluster, or in a specific occupation, in preparation for job-entry and/or further education.

GOAL 5: To provide for placement of all students, upon leaving school, in either: (a) a job; (b) a post secondary occupational education program; or (c) a four year college program.

III. Description

A. General

Newark, Delaware, is a sixty-seven square mile, rapidly growing suburban community in the lower Delaware Valley. While automobile transportation is advantageous, both the New York-Washington line of the P.R.R. and Trailway buses serve Newark. Interstate Highway 95 makes Philadelphia (50 miles), New York

(120 miles), Atlantic City (90 miles), and Washington, D.C. (100 miles) within easy reach.

The school district population is approximately 68,000, with a public school enrollment exceeding 16,000 students in grades kindergarten through twelve. The University of Delaware and corporations such as DuPont and Chrysler are major forces in the area.

Newark is an extremely diversified community with varied socio-economic levels, different racial and religious groups, and a broad range of professions and occupations are represented in the population. Newark has a constantly growing complex of light and medium industry, a variety of commercial enterprises, and large corporate installations such as the DuPont Company. These keep employment high, provide sound tax base, and help maintain a stable local economy.

The purpose of this project is to develop and implement a K-12 Career Education Instructional System for the Newark School District and the State of Delaware. The three phase approach, closely aligned to the model presented by the U. S. Office of Education Vocational and Technical Education Division in their pamphlet, Career Education: A Model for Implementation, is the foundation of the Newark system.

The three phases include the Awareness Phase (K-5), which emphasizes career awareness activities and the development of a positive work ethic; the Exploration Phase (6-8), which provides for exploration of career clusters; and the Exploration and Specialization Phase (9-12), which emphasizes in-depth cluster exploration and specialized skill development. An objective common to all three phases is to improve student performance by making subject matter more meaningful and relevant through unifying and focusing around a career development theme.

Development and implementation activities are occurring under the direction of a Career Education Advisory Council who coordinates their efforts with the Newark District. Ad Hoc Committees have established guidelines and objectives for curriculum development for each of the three levels. Career programs are being piloted in six elementary, three middle, and all three high schools during the first year. Subsequent implementation will occur in other schools at each level and on an expanded basis within the initial pilot schools.

A new vocational-technical high school is scheduled to begin operation in 1976. Assisting in the development and coordinated career programs between the vocational high school and the three comprehensive high schools will be within the scope of the project. In addition, a school for the deaf, located within district boundaries, is initiating career related programs for its students and is also involved in project activities.

Recent concepts and innovations that are being incorporated into project activities include individualized instruction, performance objectives, interdisciplinary approaches, team teaching involving academic and vocational teachers on the same team, based upon career themes, and activity oriented programs.

The project has attempted to develop programs that unify and focus basic subject disciplines on a career development theme. This should result in programs that provide students more information about careers, and about themselves in addition to a more relevant curriculum.

The integration of youth activities into the regular instructional program is a basic theme of the project. These activities must be related to the instructional program. Leadership development, civic awareness, career understanding, and social competence, the purposes of vocational student organizations, are tied to basic skill development when possible and are essential to the full career development of every student.

Staff responsible for implementation is as follows:

Career Education Coordinator	2
Secretary	1

B. District Perspective

Steps toward establishing career education were under way in the Newark District at the inception of the project. Programs such as career guidance and placement; work experience in the areas of distributive, office, agricultural, special education, and diversified occupations; and middle school exploration had been initiated through state and local support. However, these programs did not represent a comprehensive K-12 career education program.

The Career Education Advisory Council recommended that the strategy for implementing career education occur as follows:

1. Define goals and delineate these goals into working objectives at the elementary, middle and secondary levels.

2. Identify specific recommendations for implementing career education at each of these levels.

3. To the degree feasible support existing career education programs consistent with the defined district K-12 model.

4. Identify programs to complement existing ones to complete the 6-12 model and support pilot efforts in these areas.

5. Initiate K-5 pilot programs in career education which previously had been developed only informally.

Tasks 1 and 2 were accomplished by three task forces. Significant involvement occurred by business, industry and parents. Advisory Council members were instrumental in securing this substantial commitment. Initial plans called for each committee to function an average of 20 hours per month for up to a one year period--if needed. All task forces completed their tasks within a six month period. In their final report, each task force was requested to provide the Advisory Council a rationale for career education at their particular level, a delineation of the broad goals, recommendation for implementation, and the implications of a career program for their particular program in the Newark School District.

Appendix A contains the supplementary information and the compiled final report of the three task forces entitled "Goals and Recommendations for Implementation of Career Education in the Newark School District, K-12."

C. Curriculum Development

Curriculum development efforts have occurred in a manner consistent with the task force guidelines and according to a format outlined by the District Director of Instruction.

The longitudinal impact of project activities has been built into the entire philosophical and organizational approach to implementing career education in Newark. Simply stated, the project philosophy is that funds will be provided for the instructional staff to develop appropriate curriculum and identify available resources. Programs requiring substantial supplementary funds for implementation purposes will not be supported. To date all the career programs currently being piloted under CEIS sponsorship are operating through the utilization of existing resources and normal funding allocations for each building. The net result of this approach has been to maximize teacher involvement and minimize school dependency on project resources for program implementation.

Curriculum development efforts have been highly individualized by school and teacher. The strategy was to identify a series of alternative approaches to implementing career education--especially at the K-8 levels. These alternatives would then be transportable to most organizational and philosophical settings occurring within the district and also beyond district boundaries.

Volunteer teacher participants were identified through principals that expressed interest in having their schools participate. The activities that the teachers from each school accomplished included: (1) jointly describe the career education plan for their building; (2) identify strategies and resources necessary for plan implementation; (3) participate in paid summer inservice/workshop activities to develop curriculum according to a specified format and guidelines; (4) pilot the written materials; and (5) assist in the refinement of the materials.

Appendix B contains: (1) a listing of participating schools, the numbers of teachers directly involved in project activities, and the estimated number of students affected by the developed units of instruction, (2) the format utilized for curriculum development; and (3) the topical listing by school and grade level of all units and/or programs written and piloted by district teachers.

D. Orientation

Considerable effort has been given by the project staff to educating and orienting teachers, administrators, and the community concerning career education and its related concepts. The staff has had to overcome--and still has to overcome--the confusion that exists between career and vocational education. This is being accomplished through direct contact utilizing sound-slide presentations, lectures, television, and radio programs.

Radio programs included three 30-minute radio programs broadcast over the local Newark radio station. The sound slide presentation has been given to teacher groups, district administrators, the Newark Board of Education, the State Board of Education, PTA's and other such groups, the Newark Chamber of Commerce, and the National Advisory Council for Vocational Education.

In addition to these efforts, the project has been successful in getting a great deal of newspaper coverage of various school activities.

Appendix C contains the script of the sound slide presentation utilized for orientation programs.

IV. Results and Accomplishments

A. Advisory Council

A Newark School District Career Education Advisory Council has been organized and meets on a bi-monthly basis. The Council is composed of parents; representatives from business and industry; teachers and administrators from each of the three levels--elementary, middle, and secondary; state department; and post secondary personnel. The functions of the Council include advising the superintendent and project regarding direction and priorities and serving as liaison between the district and the various groups represented. Appendix D contains the Council membership list.

B. Task Force

Three task forces were established as recommended by the Council. The charge given to each committee was to delineate the broad goals into more specific subgoals, develop a rationale for each phase, and identify recommendations for implementing career education within their phase--awareness, exploration, or exploration and specialization. Each of the task forces have completed their work and the compiled report as presented to the Board of Education is in Appendix A.

C. Educational Resources Associates

Demands placed upon the community, business, and industry by career education and other school programs is rapidly leading to a need for a coordinating agency of some type to serve as liaison between the general community and public school classrooms. The Newark School District and the DuPont Company have entered into an agreement whereby each organization will provide a professional full time to establish ERA as a service organization with a priority in the area of developing a community resources guide that will be made available to district schools. ERA will initiate activities effective January 1, 1975.

D. Curriculum Development

The project priority for the first year's activities was staff and curriculum development. During the summer of 1974, sixty teachers, representing grades K-12, participated in 90 hour inservice/workshop sessions. Curriculum was developed incorporating the concepts of youth activities, infusion of career concepts, performance objectives and others. Each participating teacher agreed to pilot materials developed in their classroom during the current school year. These materials will then be edited and revised prior to increased dissemination efforts. Appendix B contains the curriculum development program/course listings. This listing reflects alternative programs available at each grade level.

E. Program Expansion

An overall goal of the project is to provide staff training for a nucleus of teachers in each district school who then would serve as the leadership team for career program expansion within that school. With pilot efforts still continuing, no formal expansion process has been yet initiated. However, participating teacher enthusiasm and leadership has resulted in significant expansion within many participating schools even at this early date.

F. Career Related Materials

Career program longevity is a continual concern of the project staff. Consequently, major emphasis has been given to identification of existing resources or securing resources via normal funding and support channels. During the past two years the district has assigned a priority to career education materials regarding the utilization of ESEA Title II library funds by district schools. Materials developed by two of the district "Title I" schools appropriately qualified these schools for supplementary funding through that source. Project staff also has published and disseminated a school listing of all career materials purchased utilizing Title II funds.

G. Integration of Career Education

As career education becomes an integral part of the total school effort in the Newark School District, greater emphasis is being placed on integrating career concepts and objectives into the established curriculum of each of the content areas. A new elementary science guide has been published by the district correlating career information with science concepts where appropriate. This effort was initiated by the district science supervisor.

H. Orientation

It was necessary to pursue orientation efforts to a greater degree than planned. The result has been very positive feedback from educators and the community alike. The degree of feedback from the community to top level district administrators has been sufficiently extensive that supplemental programs such as the previously mentioned ERA and Title II expenditures have been enthusiastically supported and potentially will magnify career related activities in the schools.

V. Evaluation

The evaluation report by Educational Testing Service was not complete at the time this report was prepared. It will be submitted as an addendum to this Interim Report upon receipt from ETS.

VI. Conclusions, Implications, and Recommendations

A. There appears to be a "readiness" for the concept of career education by business, industry, and the general community. Business and industry is receptive to programs promoting a positive work ethic, improvement of basic skills, and youth activities that convey to students expectations of employees by employers.

B. Increased understanding of the career concept by educators and the lay public must be continually promoted. Career education as a program limited to "hands on" activities utilizing tools is too vocationally oriented and not acceptable to many. Too often this is the perception of many relative to what career education really is. Through presentations and interaction with groups and individuals, the project staff was easily able to overcome this misconception.

C. A comprehensive career education program should provide a series of alternatives at each grade level from which schools and teachers can select. This can minimize the "adding on" complaint many teachers have regarding new curriculum concepts.

D. Hard sell approaches to incorporating career concepts into the overall curriculum should be avoided if possible. Students react negatively to this approach. Career concepts should be infused into the regular curriculum and dealt with appropriately when opportunities arise.

E. Except for special cases, career education should and can be implemented into existing curriculum utilizing existing funding sources and existing resources. Initiation of career programs by schools and districts should provide for staff planning to identify procedures and local resources.

F. At the K-8 grade levels, teachers have concluded that incorporating career related activities into the curriculum can provide motivational activities enhancing basic skill development.

G. Incorporating career concepts into the secondary program has been extremely difficult. High school programs are specialized to the degree that only limited opportunities exist for infusing career concepts by all classroom teachers. Groups of teachers could probably accomplish this task more naturally by demonstrating career directions within their disciplines and illustrating opportunities existing through a combination of academic and/or vocational backgrounds.

H. Interdisciplinary efforts at the secondary level will be difficult to accomplish unless the organizational patterns of secondary schools change which provide for a natural interaction among teachers.

I. Implementing the evaluation design as outlined in the draft copy of the *Handbook for the Evaluation of Career Education Programs* after project activities have been initiated for a year or more will seriously compromise the data return. Activities of this and probably other exemplary projects have not been initiated according to a strict research design. For example, it will be difficult to measure the effects of various treatments regarding implementing career concepts when it has been stressed to teachers to incorporate career concepts into regular activities. Career education is not separate from the remainder of the curriculum.

J. The evaluation design handbook is potentially an excellent aid for project directors and independent evaluators. Refinement of this document based upon experience by OE, projects, and independent evaluators should occur on a systematic and planned basis and should be initiated immediately by OE.

H Nelson Freidly Jr
H. Nelson Freidly, Jr.
Project Director

January 31, 1975
Date

/jpw

APPENDIX A

PROPOSAL TO BUSINESS AND INDUSTRY

NEWS ARTICLE: TASK FORCE INITIATION

GUIDELINES FOR TASK FORCE COMMITTEES

REPORT: "GOALS AND RECOMMENDATIONS FOR
IMPLEMENTATION OF CAREER EDUCATION
IN THE NEWARK SCHOOL DISTRICT K-12"

CEIS

Career Education Instructional System

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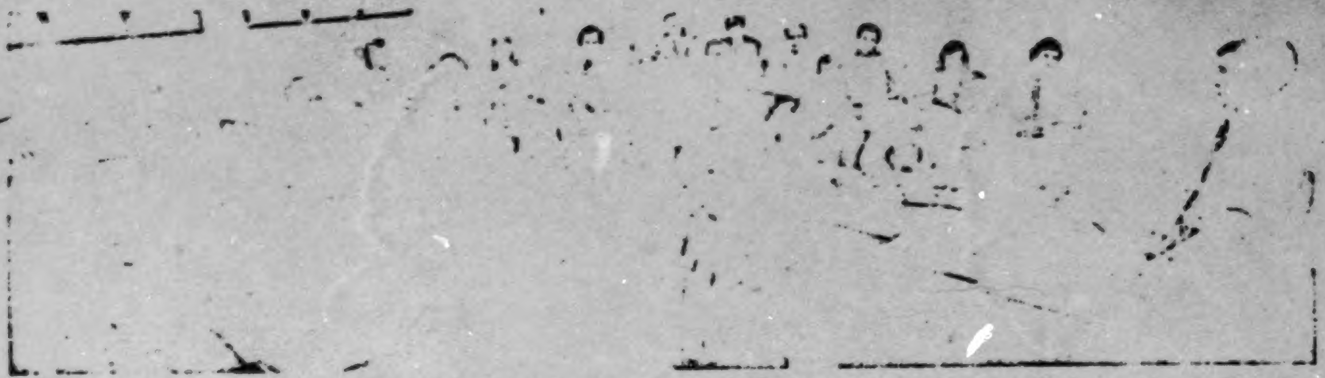
QUALIFICATIONS FOR AD HOC COMMITTEES

1. Proven administrative ability, and can catalyze committee action. This includes organizing ability and an analytical approach, plus the attitude and motivation to see the project through. A high priority requirement is the introduction of administrative know-how from business into the operation of these committees.
2. Must have sincere interest in education and young people, and some understanding of the critical problem of motivating them in a manner compatible with today's society.
3. Should have access to the point of view and needs of business, relative to their present and future employment standards.
4. Possess ability to work with and understand educators, including their traditional philosophy and its desirability.
5. Be able to devote sufficient time to this effort, for an initial commitment of one year.

TIME COMMITMENT

16 - 20 hours per month

CAREER EDUCATION PROJECT MOVES AHEAD



Primo Toccafondi, Career Education Coordinator for the Newark School District, discusses the role of the ad hoc committees at their first meeting held in the district Administration Building. The development of these committees is explained in the story below.

Total involvement has been identified as a key to the success of the Career Education Project based in the Newark School District. With this in mind, the aid of students, the lay public, business, industry, teachers, and administrators has been enlisted for the purpose of developing a comprehensive career education model, not only for the Newark School District but for the State of Delaware.

In December, 1972 a Career Education Advisory Council was developed for the purpose of providing overall direction for the activities of the Career Education Project. Since career education has different emphasis at the elementary, middle, and secondary school levels, the Advisory Council recommended that three ad hoc committees be established for the purpose of developing a conceptual model for implementation of career education at each of these three levels. The Council further stipulated that each ad hoc committee be composed of educators, students, lay citizens, representatives from business and industry.

Business and industrial support was assured as a result of a meeting organized through the efforts of Mrs. Myrtle Bowe, executive vice president of the Newark Chamber of Commerce; Mr. Richard B. Nelson, industrial engineer at the duPont Company; and Mr. J. A. Sears, employee relations department of the duPont Company. The meeting was attended by Mr. J. M. Martin, chairman of the board of Hercules Incorporated; Mr. W. S. Thompson, vice president of I.C.I. America; and Mr. John Oliver, director of employee relations department, E.I. duPont deNemours & Company. The purpose of this meeting was to discuss the Newark School District Career Education Project and secure business and industrial support for this program.

As a result of this meeting the three companies agreed to each identify one individual to actively participate in project activities. Each of these individuals will serve on one of the three ad hoc committees. These individuals will participate in the activities of this project on a regular basis for approximately one year. The individuals identified are Dr. Robert B. Scott, director of the Synthetics Development Department of Hercules Incorporated; Donald G. Dressler, Corporate Maintenance Level Engineer for I.C.I. America; and W. Carl Moran, manager of Industrial Relations Sections, Polymer Intermediates Department of the duPont Company.

The initial meeting of the project's ad hoc committees was Tuesday, April 17. The purpose of the meeting was to provide all ad hoc committee members with a general orientation to the career education project, its goals, and the role of the ad hoc committees within the overall career education program.

Career Education Project

NEWARK HIGH SCHOOL
NEWARK SCHOOL DISTRICT
EAST DELAWARE AVENUE, NEWARK, DELAWARE 19711
TELEPHONE 731-[illegible]

RECOMMENDED GUIDELINES FOR AD HOC COMMITTEES

A definition of Career Education, the three phases of the career education process, and the objectives relating to these phases have been identified by the Career Education Advisory Council. These three phases are intended to be directly correlated with elementary, middle, and high school programs of instruction. Ad hoc committees have been established for each of these three program areas for the purpose of recommending to the Career Education Advisory Council procedures for implementation of the career education model for each of these program areas.

AD HOC COMMITTEE TASKS

1. Review Available Literature:

   The objective is to identify successful components of other career programs for possible implementation in the Newark District Model. Special attention should be given to literature dealing with the fifteen career clusters defined by the U.S. Office of Education.

2. Develop a Conceptual Model for Career Education in the Phase Assigned to your Committee:

   Identify the procedures necessary to achieve the stated objectives of the committee's career phase. The committee's function is not to develop the program for its career phase. The objective is to illustrate what is to be accomplished and provide examples as to how the objectives can be achieved by teachers and students.

   The following model is suggested as a guide for committee action:

   STATEMENT OF THE DEFINITION OF CAREER EDUCATION

   TITLE OF THE PHASE (Awareness, Exploration, or Exploration and Specialization)

   RATIONALE (Explain how this phase ties in with the definition and the entire concept of career education)

LIST THE OBJECTIVES (As each objective is listed, a reason for having such an objective is to be provided)

EXPANSION OF OBJECTIVES (The objectives already provided are broad statements of curriculum intent. Each of these broad objectives should be branched into parts (or sub-objectives) based upon more definite behavioral outcomes desired. It is essential that the classroom teacher, who is to implement the objectives of this model, sees how a broad objective stated for this phase can function at the classroom level. To this end, the committee should provide example(s) of how each broad objective can be operationalized within the classroom. This would involve the committee identifying at least one sub-objective associated with each broad objective and illustrating sample learning activities such as field trips, hands on experiences, integrated learning experiences, and/or guidance activities that can be used within the classroom.

IMPLICATIONS (After concluding the expansion of the objectives, consideration should be given to the implications for (1) existing program, (2) grade level application, (3) staff utilization, (4) finance, and (5) any other relevant topics.)

3. Implementation Recommendations:

Since the report of this committee is a blueprint for action, specific recommendations relative to the implementation of the committee's model is essential. The importance of this phase of the report cannot be overemphasized. Consideration should be given to (1) scope of implementation, (2) staff training, (3) program development, (4) necessary community resources, (5) types of commitment required, and (6) phase evaluation.

GOALS AND RECOMMENDATIONS
FOR
IMPLEMENTATION
OF

CAREER EDUCATION IN THE
NEWARK SCHOOL DISTRICT
K-12

Submitted by the Newark School District
Career Education Advisory Council
Developed Under
Section 142(c), Part D
Public Law 90-576

February, 1974

PREFACE

This Career Education Advisory Council Report was developed by three ad hoc committees under the direction and leadership of Project Director R. Mike Simmons, Advisory Council Chairman H. Nelson Freidly, Jr., and Project Coordinators Primo V. Toccafondi and Edward L. Wilchinski. The work was accomplished under the guidelines established by the Newark School District Career Education Advisory Council.

The total project, entitled "The Career Education Instructional System," is a joint effort of the U.S. Office of Education, the Delaware State Department of Public Instruction, and the Newark School District. The general goal of the project is to integrate activities related to the goals and objectives of career education into the district curriculum from kindergarten through grade 12.

The project coordinators would like to express their gratitude to all who have assisted in this endeavor--the students, parents, teachers, and administrators from the Newark School District, and the representatives from E. I. duPont deNemours and Company, Hercules Incorporated, and I.C.I. America.

The individuals participating in committee activities were:

AWARENESS ELEMENTARY (K-5)

Mr. Milton Markley, Chairman	Principal	Cobbs Elementary
Dr. Robert B. Scott	Director of the Synthetics Development Department	Hercules Incorporated
Mr. Gerald Cavall	Teacher	Brookside Elementary
Mrs. Barbara Smith	Teacher	Brookside Elementary
Mr. Anthony Ligatti	Principal	Elkton Elementary
Mrs. Sandra Turulski	Teacher	Leasure Elementary
Mrs. Emily McGlinchey	Teacher	Wilson Elementary
Mr. Richard Stobaugh	Teacher	Wilson Elementary

EXPLORATION MIDDLE SCHOOL (6-8)

Mr. Paul Devine, Chairman	Teacher	Central Middle
Mr. Donald Dressler	Corporate Maintenance Level Engineer	I.C.I. America
Mr. Clarence Hall	Supervisor of Quality Assurance	I.C.I. America
Mr. Hugh Ferguson	Principal	Central Middle
Mr. Thomas Comer	Assistant Principal	Ogletown Middle
Mr. Norman Handy	Teacher	Ogletown Middle
Mrs. Alice Thornton	Librarian	Ogletown Middle

EXPLORATION AND SPECIALIZATION HIGH SCHOOL (9-12)

Mr. William Harrison Chairman	Teacher	Newark High School
Mr. W. Carl Moran	Manager of the Industrial Relations Section	duPont Company
Mrs. Sandra Drummond	Parent	
Dr. James Campbell	Associate Principal	Christiana High School
Dr. John McIntosh	Associate Principal	Newark High School
Mr. Darl Robeson	Guidance Counselor	Newark High School
Mr. Daniel Tuckerman	Teacher	Christiana High School
Mrs. Sheila Posatko	Teacher	Newark High School
Mr. Paul Thompson	Teacher	Newark High School
Mr. William McNamee	Teacher	Christiana High School

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INTRODUCTION

One of the first steps toward the achievement of success in a new program is the establishment of a comprehensive set of goals and objectives. These goals must be broad in nature to provide for flexibility in approaches to implementation yet specific enough to suggest procedures and activities for program development and evaluation.

The Newark School District Career Education Advisory Council adopted the broad goals outlined by the U.S. Office of Education for elementary, middle, and high schools. The Council recommended the establishment of three ad hoc committees for the purpose of delineating these broad goals into more specific subgoals, develop a rationale for each phase, and identify recommendations for implementing career education for each phase in district schools.

This report represents a compilation of the three ad hoc committee reports submitted to the Career Education Advisory Council. It is organized so that emphasis is given to each phase. Each phase report includes the rationale for a career emphasis within the phase, the goals and subgoals, and specific recommendations for implementing career education for the particular phase. Sample "lesson plans" are included in the appendices.

It is hoped that this report will serve as a guide to district administrators and teachers as they implement career education concepts in their schools and classrooms. Since curriculum remains in a state of flux, it is the hope of the Advisory Council that this guide continually be revised and refined as the needs of students change and as teachers and administrators gain experience in dealing with career programs.

The definition of "career education" developed by the Newark School District which serves as the focal point of this report is:

> Career education is a comprehensive educational goal designed to provide all youth the opportunity for career awareness and the opportunity to attain skills necessary to achieve economic independence and an appreciation of the dignity of work.

AWARENESS PHASE

ELEMENTARY (K-5)

RATIONALE

The child in his early years is in the process of defining roles; family roles to enable him to differ between father and mother; community helper roles which help him identify the mailman, the grocer, the truck driver and so on. The Awareness Phase can capitalize on this natural process of job identification in children, and help develop a sense of the great number of job opportunities available to adults. The Awareness Phase provides a broad base of reference which the child can use to narrow his choices of career possibilities and follow those choices in greater depth during his adolescent life.

Responsible attitudes toward work must be cultivated during the formative stages of development; the early years of a child's school life. His feelings toward himself and others, his dependability, his perseverance, his promptness, and the other fundamental building blocks of his character are formed during this early period. No matter what job the child eventually chooses, these positive attitudes will help assure success.

Occupational aspirations and positive work attitudes are important aspects of an Awareness Program, but they are of little real value without the basic skills of communication and computation, and the ability to think clearly. Since these basic skills are presently a fundamental part of an elementary school program, the Awareness Phase of career education begun at this level, will help knit these basic components together to give each child a first step on the way to a meaningful and satisfying vocation.

GOALS AND SUBGOALS

GOAL 1: TO DEVELOP IN PUPILS POSITIVE ATTITUDES ABOUT THE PERSONAL AND SOCIAL SIGNIFICANCE OF WORK.

SUBGOALS: To develop in pupils an awareness that:

1. The society in which we live is dependent upon people working.
2. Rewards and satisfaction can result when people work.
3. There are rules for all kinds of work.
4. All kinds of work are interdependent and should benefit both the individual and society.
5. Attitudes and personality factors have an effect on work, performance, and success.
6. Work has dignity and is worthwhile.
7. Work involves the production of either goods or services.

GOAL 2: TO DEVELOP EACH PUPIL'S SELF-AWARENESS.

SUBGOALS: To develop in pupils an awareness that:

1. All people have dignity and are worthwhile.
2. People have differing abilities, values, attitudes, and interests.
3. Occupations differ in their requirements and prospects.
4. Understanding and accepting oneself is a continuing developmental process which is influenced by experiences throughout life.
5. Each person assumes several different roles in relation to the people and situations with which he comes in contact.

GOAL 3: TO DEVELOP AND EXPAND THE OCCUPATIONAL AWARENESS AND OCCUPATIONAL ASPIRATIONS OF THE PUPILS.

SUBGOALS: To develop in pupils an awareness that:

1. Some skill or training is necessary for all career choices.
2. All people can and should contribute their talents and capabilities to career or avocational endeavors.
3. People need to adapt to technological and sociological changes which create or eliminate work.
4. Environmental and cultural factors determine the kinds of career choices available.
5. A man's career affects his way of life.

GOAL 4: TO IMPROVE OVERALL PUPIL PERFORMANCE BY UNIFYING AND FOCUSING BASIC SUBJECTS AROUND A CAREER DEVELOPMENT THEME.

SUBGOALS: To develop in pupils an awareness that:

1. All kinds of work need basic skills and training.
2. Skills developed through basic subject materials can lead to an enjoyment of both work and leisure activities.
3. Acquisition of fundamental competencies is necessary for future skill development.
4. Communication skills developed through basic subjects can lead to better interaction and job understanding.
5. Successful learning experiences in basic subject areas are fundamental to achieving career interests and making adequate decisions.
6. Variety in depth and types of skill development effects interdependency among people.

IMPLEMENTATION RECOMMENDATIONS

Staff Training

1. It is imperative that the general philosophy and direction of Newark School District in career education be enunciated for all staff members, at many times and in many ways to insure understanding of the guidelines under which we are developing the program. For instance, of what importance is career education in the total district list of priorities? Does career education replace existing curricular offerings or does it supplement them? Does money to support career education flow from other areas of support and, if so, what areas?

2. Principals and teachers working in the pilot schools should be involved in pre-service and inservice training as a means of orienting the staff to the project and giving the necessary expertise to carry on viable classroom work. These efforts should begin before the opening of school and carry on during the year.

3. These efforts should include orientation to career education, a summary of the relation of the career education focus to the existing program in social studies, and ample opportunity for each staff member, individually or as part of a working group, to develop materials and implementation schemes for his or her class during the year.

4. To help the pilot schools in accomplishing the normal run of activities plus the extra burdens of implementing and refining career education, it is recommended that these schools have all district inservice days allocated to them for their own use.

5. Staff of pilot and of non-pilot schools would be encouraged to gather ideas and share thoughts.

6. A director of the awareness phase of career education is needed to lead program development by being a resource person, an organizer of inservice experiences, an evaluator of the process of implementation and refinement. If the career education project is to be a success, it will need strong, full-time leadership.

7. There is a need for a person in a coordination role to back up the training and implementation function of the director. The coordinator could actively enlist the support of the local businesses and industries and provide resource persons and materials to interested classroom teachers. The coordinator would also act as a central source of supply for materials donated by businesses and would arrange for field trips for the district to prevent overuse of any one particular resource. The coordinator would know the details of the many field trips possible and could prepare teachers for the trip or could preview the trip for a class, in much the same way the planetarium and the outdoor lab are previewed.

This coordination could come from several sources:

A. From the resources of the Educational Research and Development Council of Delaware.
B. From the office of the director of the awareness phase.
C. From an elementary teacher(s) hired to do this task on an after hours basis (similar to OASIS).
D. From a person hired as coordinator on a full-time basis.

8. Secretarial help should be provided to allow maximum time for the direction and the coordination necessary for interaction with the professional staff. A source of help might be the high school co-op program.

9. The ACES program might be restored to allow teachers to visit local business and industry and broaden their own understanding of the present situation. If a four year cycle were considered, with primary teachers, intermediate teachers, middle school teachers, and high school teachers each going in a separate year; this might be a suitable compromise between a large district and a reasonably small business community.

Program Development

1. Program and staff development go hand in hand. A well-trained enthusiastic staff will create the dynamic program needed.

2. The program should develop from the rudimental state in which it is presented to a more highly developed one over the summer, with emphasis being placed on a program which suits the local school situation but which is also easily transferable to any school situation in Newark.

3. Periodic reviews of development and formal assessment of progress should be made.

4. There should be a number of meetings in which the pilot schools share information and make suggestions for practical application of the program. Some attempt should be made to trade off staff within each building and among all buildings as a way to get information and ideas flowing.

5. Videotaping projects as they evolve, broadcasting summaries of activities, preparing slide shows and newsletters, and other devices should be used to keep all schools and the public informed of the progress of the project.

6. The input from the staffs of the pilot schools should be processed so that an improved document could be prepared for the use of the other schools which move into project activities in succeeding years.

Financial

1. With increased requirements for safety equipment, a thorough review of such demands for each field trip must be made. If liability insurance or safety devices are required, there should be some provision made by the district to supply this protection from a central source.

2. Full implementation of the awareness phase of career education assumes much contact with the business community, either through people coming in or children going out of school.

   The district might consider the purchase of small busses, similar to a Chevrolet Carryall, for single schools or for parts of small schools. This vehicle could be used to take small groups of children to visit on an almost continuous basis, allowing children to visit very appropriate places at highly appropriate times, permitting the teacher to individualize the contacts for the children in her class. A group of teachers, if not all, in each building would have chauffer's licenses and be able to drive the bus when necessary. Perhaps enlarging the circle to include the principal, custodians, and aids would increase the possibilities for individualizing trips and keep the costs per child as low as possible.

   The vehicle could also be used to gather resource materials (paper, displays, seedlings, etc.) and could certainly be used to augment the already burdened district courier and delivery systems.

   If this idea is not feasible, perhaps supplements for field trips should be provided on a per pupil basis. Many children who might benefit most from field trips and personal contacts with possible career opportunities are often not able to financially afford these trips. This supplement might be related somehow to the number of children on free lunches in a building or some other sliding scale to provide an equitable distribution of funds.

3. Even though the district libraries and classrooms have many of the materials recommended in this program, there still will need to be sources of funds available to make the program operational by filling in recognized voids and to help the program expand as new development takes place and new materials come onto the market.

4. The visitation of other schools, in and out of the district, will require substitute teacher funds and travel subsidies.

5. A budget for materials must be provided for the summer work session in which the production of charts, displays, games, etc., will be a requirement.

6. A leadership staff must be developed for the career education program in Newark, including an Awareness Phase Director, a Community Resources Coordinator, and a secretary. These roles are discussed previously in this paper.

Time

1. All inservice days should be made available to the pilot schools in this project to assure that full attention can be devoted to program development, refinement, and evaluation, in addition to other normal demands.

2. The non-pilot schools could be receiving preliminary information and being readied for their move into the program the following year, through using the inservice days provided.

Personnel Support

1. A Career Education Advisory Committee of representative members of the community should be established to serve several functions:

   a. to act as a sounding board in assessing the impact of career education upon the business community and upon the community at large;
   b. to encourage the interest and support of influential persons in the community;
   c. to actively engage community persons with recognized expertise in developing the program more fully.

2. Administrative support is required for success. Time at administrative meetings should be devoted, on a regular basis, to the analysis of progress and problems in the program, along with plans for advancing the program in the following year(s). Just how much Newark wants Career Education as a district project should be measured by the awareness and the commitment of the total administrative team.

3. Public information efforts should focus on the development of the project and its implementation in the schools. Particular effort should be made to involve the schools in reporting their activities and accomplishments.

4. The district supervisors could be very helpful in working within the program and helping to find links between career education awareness projects and the basic skill development which is a necessary part of every school's curriculum.

Necessary Community Resources

1. A Career Advisory Committee (already outlined).

2. A Community Resources Coordinator (already outlined).

3. Develop community awareness and support through the Advisory Council; news releases; student-produced shows on CATV, radio, etc.; use of resource persons; career education days utilizing local business and professional men, etc.

4. Assemble artifacts, publications, displays, etc., from business and industry for district use:

    a. policeman's uniform
    b. lineman's gear
    c. baker's outfit
    d. fireman's tools
    e. draftsman's instruments
    f. dentist's tools
    g. display of leather tanning processes
    h. ad infinitum

PHASE EVALUATION

1. The staff should be assessed on their attitudes toward various occupations, the development of the work ethic, self-concepts, etc., as a pre-measure. A post-measure would be administered at the close of the year.

2. A similar inventory for students should be developed.

EXPLORATION PHASE

MIDDLE (6-8)

RATIONALE

The concept of career education is particularly applicable in the educational development of the middle school student. These years are crucial in the development of an individual. The student is changing physically, socially, sexually, mentally, and psychologically. The exploratory phase of career education serves to help meet the needs and interests of all middle school students.

Career exploration assists the student in learning a process for decision-making toward the selection of career cluster areas for indepth study. During this phase each student is helped to gain an understanding of himself: his interest, abilities, values and needs. This understanding is then used to make career-related choices. The student explores a wide variety of occupations through meaningful, hands-on experiences in as many occupational clusters as possible. Opportunity for indepth exploration should also be available according to a student's need.

Therefore, all students in the middle school years, as a normal part of their educational process, should be seriously involved in activities that help them develop a greater proficiency in the knowledge and skills required in the world of work, to develop positive attitudes and proper work habits, and to gather information with which they can act as they consider possible educational and occupational alternatives.

GOALS AND SUBGOALS

GOAL 1: TO PROVIDE EXPERIENCES FOR STUDENTS TO ASSIST THEM IN EVALUATING THEIR INTERESTS, ABILITIES, VALUES, AND NEEDS AS THEY RELATE TO OCCUPATIONAL ROLES.

The student should be able to:

1. engage in a variety of hands-on-experiences--a "creative activity, a designing activity, or a construction activity"
2. experience success in his career activities
3. develop interpersonal skills through participation in a variety of grouping situations
4. make both positive and negative choices to help him discover his likes and dislikes
5. discuss his interests and abilities with a teacher or guidance counselor, based upon the results of interest inventories, aptitude tests, and other appropriate information
6. justify his career choices according to available evidence
7. recognize the social, economic, and personal importance of work

8. display a positive attitude toward work
9. practice the desirable habits that are required in the world of work (e.g., promptness, attendance)
10. acquire possible life-long avocational choices or hobbies

GOAL 2: TO PROVIDE STUDENTS WITH OPPORTUNITIES FOR FURTHER AND MORE DETAILED EXPLORATION OF SELECTED OCCUPATIONAL CLUSTERS, LEADING TO THE TENTATIVE SELECTION OF A PARTICULAR CLUSTER FOR INDEPTH EXPLORATION.

The student should be able to:

1. investigate careers within the fifteen job clusters
2. select his own tentative career choices and/or career courses
3. consider the consequences of his career choices
4. investigate career alternatives existing within the community
5. recognize national and world-wide career opportunities
6. examine the characteristics and requirements of different careers (e.g., working conditions, educational and personal requirements, employment possibilities, socio-economic status and life style)
7. compare occupations in specific clusters with regard to their range, nature, and relatedness
8. compile information about a specific career or occupation
9. distinguish between the professional, technical, and non-technical levels of careers
10. recognize the necessity for adaptability in a constantly changing technological society

GOAL 3: TO IMPROVE THE PERFORMANCE OF STUDENTS IN BASIC SUBJECT AREAS BY MAKING THE SUBJECT MATTER MORE MEANINGFUL AND RELEVANT THROUGH UNIFYING AND FOCUSING IT AROUND A CAREER DEVELOPMENT THEME.

The student should be able to:

1. demonstrate effective communication skills
2. demonstrate basic numerical skills
3. demonstrate manual-perceptual skills
4. engage in problem-solving and decision-making
5. develop effective work and study habits
6. develop consumer skills
7. describe the need for basic educational skills in the world of work
8. discuss the relevance of base subjects to future career possibilities

IMPLEMENTATION RECOMMENDATIONS

In selecting the method of implementing a career education program in a middle school, it is essential that the program be based on the exploratory concept. The responsibility for selection of implementation approach(es) rests with the principal after consultation with his staff. District support of the school program should be provided regardless of the approach(es) selected. The ultimate goal should be to have a totally integrated career education program within each middle school.

The following is a list of six organizational approaches investigated by the Ad Hoc Committee:

1. Base subject approach
2. Expressive arts approach
3. Cluster approach
4. Mini-courses by interest areas approach
5. Objective approach
6. Team approach

Each of these approaches is described in the next section with regard to definition, rationale, and considerations. A chart summarizing the implications of these approaches follows the description.

BASE SUBJECT APPROACH

Definition: Base Subject Approach

The content or processes that are taught in math, science, social studies, and language arts become the focal point for infusing career information.

Rationale

The base subject approach is directly related to the third goal of the exploratory phase of career education: to improve the performance of students in basic subject areas by making the subject matter more meaningful and relevant through unifying and focusing it around a career development theme. The advantages of the base subject approach are:

1. When the career implications of basic subjects are investigated, the subject matter becomes more relevant to the students' everyday lives.

2. Students will be motivated to learn more of the base subject content.

3. This approach can be implemented with existing staff and facilities.

4. Base subjects provide for exploration of a wide variety of careers.

5. The base subject approach requires little or no change in existing schedules.

6. All students will be exposed to career education throughout the school day and at all grade levels.

7. This approach lends itself to direction by a school advisory committee.

Considerations

The base subject approach is easily implemented into the existing school program since it requires no special changes in staff, facilities, or schedules. However, the base subject approach does depend on planning time and coordination time for success.

A new approach to teaching tradtional subjects must be taken. Base subject teachers need to accept the concept of career education, have guidance in the restructuring of their subjects io include career information and activities, and participate in the exchange of ideas with other base subject teachers (across disciplines and across grade levels as well as within).

The base subject approach carries certain limitations. This approach does not involve the entire staff in career education because it is implemented by only the base subject teachers. Furthermore, the careers explored are limited to the four basic subject areas; students may not have an opportunity to explore interest areas not included in their mathematics, science, social studies, or language arts classes.

EXPRESSIVE ARTS APPROACH

Definition: Expressive Arts Approach

The content or processes that are taught in the expressive arts (industrial arts, home economics, health and physical education, and the fine arts) become the focal point for infusing career information.

Rationale

Career education can be incorporated into the expressive arts because of the nature of these subjects. The expressive arts are closely related to specific clusters within the fifteen occupational clusters identified by the U. S. Office of Education. For instance, the teaching of industrial arts can be tied with the clusters of Manufacturing and Construction; home economics with Consumer and Homemaking Education; health and physical education with the clusters of Health and Hospitality and Recreation, and music and art with the Fine Arts and Humanities cluster. In addition, these disciplines have included--perhaps more so than base subjects have--"hands-on" activities, the type of activity that is vital in the exploratory phase of career education. The advantages of the expressive arts approach are:

1. The content of the expressive arts subjects become more meaningful and relevant.

2. Students are motivated to learn more of the subject matter of the expressive arts curriculum.

3. This approach can be implemented with existing staff and facilities.

4. The expressive arts approach requires little or no change in existing schedules.

5. The expressive arts provide for exploration of a wide variety of careers.

6. This approach lends itself easily to hands-on activities.

7. Students are exposed to basic skills required in specific careers.

8. This approach can be directed by a school advisory committee.

Considerations

The expressive arts approach is easily implemented into the existing school program since it requires no special staff, facility, or scheduling changes. However, the expressive arts approach does depend on the effective restructure of expressive arts activities to include career exploration. This requires inservice time for planning, coordination, evaluation, and revision.

The expressive arts approach carries certain limitations. This approach does not include the entire school staff since it is implemented by only the expressive arts teachers. Furthermore, the careers explored are limited to those related to the expressive arts; students may not have an opportunity to explore interest areas not included in industrial arts, home economics, health and physical education, music, and art classes.

CLUSTER APPROACH

Definition: Cluster Approach

Career education is organized around the occupational clusters, as identified by the U.S. Office of Education. Specific courses of long or short duration are offered based on a particular cluster or subcluster.

Rationale

The cluster approach is important for the following reasons:

1. It enables the teacher to organize curriculum for maximum career exposure.
2. By investigating clusters and their subclusters, the student may have the opportunity to explore nearly all the occupations available to him.
3. This approach helps students to see similarities and the relatedness of occupations in a cluster, subcluster, or specific area. This in turn will help remove the fear of change that can hinder a student from moving from one occupational selection to another.
4. Individual student interests would fall under specific subclusters. By taking this interest as a starting point, the teacher can lead the student into a cluster or subcluster study, and in this way broaden the student's scope of interest.
5. The cluster approach could involve the entire staff in career education; they in turn may carry career information into their other teaching responsibilities.
6. This approach lends itself to organization easily integrated into the existing school program.
7. The cluster approach requires a minimum of facility changes or staff additions to implement.
8. It provides for exploration of all clusters.
9. This approach lends itself to hands-on activities.
10. Students learn basic skills necessary for specific occupational clusters.
11. This approach is easily directed by a school advisory committee.

Considerations

The cluster approach can be implemented through the following alternatives:

Alternative 1. Courses can be offered which last a semester or the entire school year. Each course would deal with a specific cluster; thus, there would be different career course offerings. The course selections can be offered according to the teachers' experiences or according to which clusters best fit with a subject area. This alternative may be too broad in scope since the course offerings are limited to the job clusters. Because of the scope of each cluster, the duration of the courses must be relatively long. Consequently, exploration may be restricted. Furthermore, the courses may become a hard-sell approach to careers which could produce negative attitudes.

Alternative 2. Mini-courses can be offered which would be organized around the sub-clusters. Each course would deal with a specific subcluster, and the number of offerings would be larger. By limiting the courses to a short duration, the students can explore a greater variety of areas. The course selections can be offered according to the teachers' experiences or according to which subclusters best fit with a subject area.

An example of alternative 2 would be radio and TV broadcasting (a subcluster of the Communications and Media cluster), offered for a seven-week period. Hands-on activities may include student written and produced video tape productions as well as student radio broadcasts.

In both alternatives there is need for coordination. Some procedure must be defined to insure that all clusters are being covered in an appropriate manner. This could be done with the help of a school advisory committee.

MINI-COURSES BY INTEREST AREAS APPROACH

Definition: MINI-Courses by Interest Areas Approach

Career education is offered through courses of short duration and selected by the student according to specific career interests. A variety of courses is offered for exploration in a number of the fifteen occupational clusters. The courses are scheduled so that each student has the opportunity to select several electives during the school year.

Rationale

The mini-courses by interest areas approach is found to be a workable approach for the middle school student who is at the age of exploration. The reasons for the selection of this approach include the following:

1. It offers a broad selection of career interests during the middle school years.
2. Students learn basic skills required in specific occupations aligned with their interests.
3. There is an opportunity for exposure to all fifteen career clusters.
4. This approach lends itself to a variety of teaching methods including hands-on activities, subject tie-in, community resources, interviews, role-playing and on-the-job visitations.
5. The mini-courses by interest areas approach allows various approaches to student interests including skill and hobby interests, theme interests, or career interests, each having occupational possibilities.
6. This approach lends itself to an organization which is easily integrated with the existing school program.
7. It requires a minimum of staff additions or facility changes.
8. The total staff could be involved in career education. They in turn may carry career information into their other teaching responsibilities.
9. Mini-courses by interest areas draw on each teacher's non-educational training and occupational experiences and offers an opportunity for optimum expression.
10. This approach is easily directed by a school advisory committee.

Considerations

The mini-courses by interest areas approach can be implemented into the school schedule by offering a selection of specific occupational courses to be elected by the students.

The school year is divided into units of short duration to allow the student greater variety for explorations. These course selections can be offered according to the teachers' occupational experiences or in accordance with student requests.

Each course will present specific career or occupational interests, presenting the characteristics of the career and information concerning basic skills and educational requirements for entry. Learning experiences should include simulated, hands-on experiences and visitations to community job sites.

Quality guidance and counseling services are essential components of this approach. Ideally a profile sheet would be kept on each student to be used in assisting him in making choices at the middle school level and in choosing a cluster for indepth study at the high school level.

Examples of mini-courses by interest areas may include the following:

Cartooning
Airport Services
Performing Arts
Medical Careers
Newspaper Careers
Oceanography
Secretarial Skills
The World of Drama
Careers in Design
Wildlife Conservation
Becoming an Interior Designer
Careers in Sports
Architect Careers
Photography

OBJECTIVE APPROACH

Definition: Objective Approach

The subgoals within the three goals for career education at the middle school level become the primary focus of the educational experience.

Rationale

The objective approach would change the entire school organizational pattern to focus on the accomplishment of the career education objectives. The goals and objectives of the middle school program would be used. A plan of action would be agreed upon by a joint staff meeting of teachers and administrators, and a curriculum would be established to meet these objectives. A continuous investigative process would be established to make certain the objectives are current and realistic. The advantages of this approach are:

1. Educational activities are goal-oriented rather than subject matter oriented.

2. All objectives of career education would be covered.

3. Daily activities would be planned to meet specific objectives.

4. Formalized evaluation procedures could be used.

5. The objectives can be periodically reviewed and modified.

6. This approach provides for exploration of the widest variety of careers.

7. Students would learn basic skills required in specific occupations.

8. The objective approach involves the entire staff in career education.

9. This approach provides for hands-on activities.

10. The objective approach lends itself to direction by a school advisory committee.

Considerations

This approach is more difficult to implement because it requires a change in the school's organizational pattern. Intensive training in the objective approach for everyone involved will be required initially. Joint agreement of the specific objectives by both the principal and teachers is essential.

Staff utilization leading toward a twelve-month employment concept will probably be required.

There is a need for continuous consultant services as well as teacher inservice time to (1) determine specific objectives; (2) develop curriculum and activities to accomplish the objectives; (3) evaluate the success of the program; and (4) review and revise the objectives.

This approach will be limited if the objectives are not well defined. All objectives should receive equal attention.

TEAM APPROACH

Definition: Team Approach

Teams of teachers can be organized according to representation of subject disciplines or according to certain objectives in the career education program.

Rationale

The team teaching organizational pattern permits the accomplishment of career objectives in two ways. The team could adopt a basic theme or concept as central to their instructional goals. Career objectives can be integrated appropriately into the thematic process in an interdisciplinary manner. A second alternative involves a team organizational structure based on objectives. This alternative is outlined under the Objective Approach.

The advantages of the team approach include:

1. It provides the opportunity for interdisciplinary program development.
2. Duplication of program effort is avoided.
3. The team approach provides opportunities for increasing program efficiency.
4. It maximizes teacher strengths.
5. It provides for joint planning efforts.
6. It provides the opportunity for improving the evaluation process of student performance.
7. A nongraded approach to instruction can be taken.
8. It provides greater opportunity for individualized instruction.
9. Program can be organized around "themes" or "objectives" instead of subjects.
10. Students learn basic skills required in specific types of occupations.
11. The team approach involves the entire staff in career education.
12. This approach can be directed by a school advisory committee.

Considerations

This approach may require a change in the school organizational pattern. The organization of teams can vary, even within a school.

Time must be provided to re-organize the curriculum according to themes or objectives. Great amounts of inservice workshop time may be required.

Consideration should be given to a differentiated staff structure. Staff utilization may lead to the requirement of twelve-month employment for the purpose of (1) determining objectives, (2) developing curriculum, (3) evaluating the program, (4) reviewing and revising the objectives and curriculum.

Table 1

A Summary of the Implications of the Six Orgnnizational Approaches

	Existing Program	Grade Level	Staff Utilization	Finance	Other Implications
Base subject approach	No administrative changes; Restructure of base subjects to include career activities.	6, 7, 8 or non-graded	Inservice to rewrite curriculum of base subjects; No additional staff needed; Limited staff involvement.	Inservice; New materials.	Difficult to cover all 15 clusters; Some cluster coverage may be "artificial"
Expressive arts approach	No administrative changes; Restructure of expressive arts to include career activities.	6, 7, 8 or non-graded	Inservice to rewrite curriculum of expressive arts; No additional staff needed; Limited staff involvement.	Inservice; New materials.	Difficult to cover all 15 clusters; Lends itself to "hands on" activities,
Cluster approach	New course offerings based on 15 career clusters.	6, 7, 8 or non-graded	Inservice to develop new courses; Staff training in cluster areas; Total staff involvement optional.	Inservice; New materials.	Duration of course may restrict exploration; Too broad in scope; Hard sell approach to careers--may produce negative reaction.

Table 1 (continued)

	Existing Program	Grade Level	Staff Utilization	Finance	Other Implications
Mini-courses by interest areas	Minimal administrative changes; New elective offerings based on student/teacher interests.	6, 7, 8 or non-graded	Inservice to develop mini-courses; Can involve total staff.	Inservice; New materials; Minimal training and material requirement.	Care must be taken so exploration occurs in all 15 clusters; Lends itself to true exploration and student choice.
Objective approach	School organization changed to focus on the accomplishment of career-related objectives; Maximum administrative direction and joint staff planning.	6, 7, 8 or non-graded	Training in the objective approach; Formalized evaluation procedure; Need for continuous consultant services.	Sizable initial training effort; Staff utilization leading toward 12-month employment.	Staff utilization for accomplishment of objectives rather than teaching subject oriented classes; Program limitations determined by the objectives; Constant revision process.
Team approach	Teaching teams composed of both base subject and expressive arts teachers; Program focus is on objectives and/or themes; subject areas become means to an end, not ends in themselves.	6, 7, 8 or non-graded	Daily team planning; Inservice for initial organization and for curriculum development; Differentiated staff.	Necessary inservice; possible funds for daily team planning and differentiated staff.	Maximizes teacher specialties; Efficient coverage of career concepts; Nongraded and individualization possible; Organization of teams can vary.

GENERAL RECOMMENDATIONS

In accordance with the recommended guidelines, the Ad Hoc Committee has delineated the three goals of the exploratory phase of career education into more definitive subgoals. While these objectives represent the best thinking of this committee, they are not all inclusive. It is essential that continuous evaluation and revision of these objectives take place.

Each of the six organizational approaches previously described carry certain advantages as well as limitations. Particular approaches complement each other, and this committee recommends that various combinations of these approaches be considered.

Each middle school should have its own advisory committee composed of administrators; teaching, guidance, and library staff; business, industrial, and labor personnel; and parents. The success of the program is dependent on the commitment of these groups. The advisory committee will help implement, coordinate, and evaluate the respective career education program.

The program should be evaluated in terms of program objectives. A variety of evaluation techniques should be used. The method and frequency of evaluation should be determined by each middle school. All of those involved in the school's program should participate in the evaluation: parents, students, teachers, all other school personnel, and the school advisory committee. There should be input from the District Advisory Council and the Ad Hoc Committees. Evaluation by a third party also should be considered.

Achievement of the goals of career education will necessitate the utilization of all available resources--in the school and in the community. Success of any program will depend on the joint planning and agreement and a deep commitment to career education by all who are involved.

EXPLORATION AND SPECIALIZATION PHASE

SECONDARY (9-12)

RATIONALE

High school curriculum and teaching methods as they presently exist often lack relevancy, do not adequately prepare students for the world of work, by-pass large numbers of students who are not oriented toward college preparation, and inadequately prepare students to live as productive citizens in a society of rapid and constant flux.

The points illustrated below highlight some of the reasons for a re-evaluation and possible new emphasis that should take place in high school program development:

1. Although careers requiring college programs are components of career education, the curriculum as it presently stands is too heavily oriented toward college entrance preparation.
2. At various stages much of the curriculum seems to be irrelevant to a large number of students and unrelated to the real world.
3. There is minimum exposure to career opportunities at all levels.
4. There is limited emphasis in work-study or vocational programs at all levels and very limited preparation for successful interaction in the market-place.
5. There is minimal emphasis on human development and social behavior.
6. There is a limited choice of electives within an interest area and little opportunity to explore other areas.
7. Maximum use of the school day for educational purposes is not being fully attained.
8. Students are often forced to make an early commitment to a "tracked" system.
9. Meaningful student input into the decision making process is limited.
10. There is a high rate of "drop-outs" both figuratively and literally.
11. The professional staff seems to lack an understanding of and a commitment to a set of educational goals associated with a totally integrated, pre-school through grade 12 program.

In order to develop an educational model capable of incorporating programs designed to meet the objectives outlined by the Advisory Council, such a model must first be capable of addressing itself to the alleviation of these concerns.

GOALS AND SUBGOALS

Two important points must be emphasized relating to goals and subgoals. This report focuses on career education--a component of the total educational package. Career education by itself is a goal of education. To emphasize this, six goals of sociological nature have been added to the five career goals. The remainder of the report will deal only with the goals dealing with career education.

Subsequent portions of this report will recommend a reorganization of secondary schools according to program. Consequently, the delineation of these broad career goals into subgoals is a task that should be accomplished for each individual program. The size and scope of this task does not permit its accomplishment by this committee for each anticipated program.

CAREER GOALS

1. To provide indepth exploration and training in one occupational cluster leading to entry-level skill in one educational area and providing a foundation for further progress, leaving open the option to move between clusters if desired;
2. To improve the performance of students in basic subject areas by making the subject matter more meaningful and relevant throgh unifying and focusing it around a career development theme.
3. To provide guidance and counseling for the purpose of assisting students in selecting an occupational specialty with the following options; intensive job preparation, preparation for post secondary occupational programs, or preparation for a four-year college.
4. To provide every student intensive preparation in a selected occupational cluster, or in a specific occupation, in preparation for job-entry and/or further education.
5. To provide for placement of all students, upon leaving school in either; (a) a job; (b) a post secondary occupational education program, or (c) a four year college program.

SOCIOLOGICAL GOALS

1. To provide a base for personal and social change.
2. To participate in life-time sports to the extent of his abilities.
3. To appreciate broad enrichment opportunities.
4. To use leisure time wisely, balancing those activities which satisfy him with those that are socially useful.
5. To gain a realistic understanding of their human potential and limitations so as to command a positive self-concept.
6. To gain an appreciation of all life and a tolerance for various human ideas and ideals.

In developing the following model to implement career education, the committee recognized:

1. A successful career education program ultimately requires absolute individualization of programs. Student course selections, decision making opportunities, progression from one

stage of the program to another, and corrective techniques, must all be tailored to the needs and priorities that the student learns to set for himself. This model, therefore, charts a course that the committee feels most students will take, realizing that many channels must be open for those students on a different bearing.

2. As students approach the specialization phase, the preliminary phases of awareness and exploration have been ongoing and in fact continue in a co-existing fashion during the specialization phase.

3. Implementation of this model on a district wide basis cannot be effected in one year. Adoption of this concept would probably require implementation in such a way that components could be accomplished within specific time periods.

4. Implementation of this concept is opportune in that it can be closely coordinated with the evolving curriculum of the Newark Vocational School to maximize program fit among district high schools.

Organization

a. Staff: Teaching and guidance staff members would belong to both a traditional academic department and a career interest department. The career interest departments would be created by the staff by combining related occupational clusters defined by the U.S. Office of Education. Academic departments would be charged with defining the basic concepts and skills pertinent to the particular department and developing programs of instruction which would accentuate these basic concepts and skills. The career interest departments would be charged with developing programs and curriculum accentuating the basic skills and concepts relevant to each of the HEW career clusters. As curriculum is developed, tasks common to all occupations should be stressed and within closely associated career clusters, basic common skills and concepts should dominate so that maximum student choice and flexibility is maintained.

   Within both departments, but particularly the career interest department, this process must be evolutionary and continually evaluated. Student performance standards must be developed and maintained.

   The role of guidance is critical. Counselors should no longer be primarily testers and schedulars, but rather work directly with teachers and students to support and evaluate curricula at each instructional level. Counselors dealing with initial secondary education experiences should be informed in market survey work so as to better advise students in cluster selection. As students complete their secondary programs counselors should emphasize guidance for job placement during the final year's work and guidance in post high school career specialty. At all instructional levels counselors should be suggesting alternative career choices based on student interest. They should be familiar with the Dictionary of Occupational Titles and hopefully have varied work experience. They should create with teachers, student opportunities for:

--solitary creative activities;
--group function decision making activities;
--group function service-oriented activities.

b. Students: All students would be administratively assigned to a general comprehensive high school.

A vocational-technical school would complement the general comprehensive high school program and would not have "home" students assigned.

The students initial high school experience should be characterized by exposure to those skills and concepts clearly defined by each academic department that are necessary for a successful life and common to all occupations. Within the framework continued exploration and survey of career clusters should occur.

Early in their high school programs, students must make a tentative career cluster choice. At this time, also, involvement in a social and occupational youth activity group should be encouraged. Such groups should be allowed to evolve from student interest and needs; and any group or activity that motivates students, contributes to cohesiveness and interaction within the school, and is educationally sound should be supported by the professional staff.

Elected representatives of the youth activity groups could constitute the Student Government Association and subsequent leadership in the Student Government Association could be elected from this body. For this to be successful, however, school administrators must allow the Student Government Association a meaningful voice in policy determination as it relates to student affairs.

Indepth career cluster exploration based on the post 9th grade tentative career cluster choice should characterize the 10th grade, and student association with the occupational interest departments begins to dominate. Students must have opportunities to make choice evaluations and, if necessary, take alternative measures leading to a new career cluster choice. Such changes must be expected and should provide for a minimum delay in career development. Corrective measures might include a slight emphasis shift within a course such as bio-chemistry to biophysics or they might require a complete rescheduling of courses and conceivably include night or summer school attendance.

During the 11th grade, student commitment to specialized study within a career cluster will dominate. Eleventh grade work could be divided accordingly:

one-half day career specialty area (at Vo-Tech or home school)
one-half day basic education supportive of course specialty

Options for program reevaluation and adjustment would be the same as between grade 10 and 11.

Twelfth grade work would be a continuation of the specialization phase of the 11th grade, however, work in the cluster areas should emphasize work experience, internships, and as many "real-life" experiences as possible. The years work could be divided accordingly:

one-third year on career specialty and related education (continue one-half day basis of 11th grade)
one-third year working or serving in community in career specialty area
one-third year on career specialty and related education (continue one-half day basis of eleventh grade)

Program reevaluation and adjustments should again be available.

In addition to the above program the committee feels that:

1. There should be ooportunities for students to take courses on an optional basis in other cluster areas for pleasure or education, particularly during grades 10, 11, and 12.
2. High school work in career specialty areas should be designed to provide job entry level skills (i.e., apprentice entry, cosmetology exam preparation, stenogrpphic entry, college entry, etc.) - not finished skills.

RECOMMENDATIONS FOR IMPLEMENTATION

First Year

1. The conceptual model presented for this phase calls for a reorganization of the secondary schools using program rather than subject as the basis for this reorganization. This reorganization should be a joint district effort to maximize the effeciveness of the programs offered in the three comprehensive schools and the vocational skills centers.

2. Concurrent with the development of a reorganization plan would be the identification of programs whose implementation will be:

   a. the total responsibility of the comprehensive high schools.
   b. a shared responsibility by the comprehensive high schools and the vocational skill center.

3. Two or three career or program areas should be selected for a pilot approach toward the development and implementation of a total program to include basic skill, interdisciplinary, and specializad program components.

4. To succeed, a career education program has to be directly tied to the total community and to the range of services it can provide to the district schools. A comprehensive document identifying career and cultural resources--to include field trip opportunities, resource people, and various career experience sites should be developed and maintained. This could be accomplished on a cooperative basis with a community agency such as the Delaware Industry-Education Coaction.

5. The implications for staff involvement is extensive. Consequently:

   a. Extensive career related curriculum development workshops for both academic and occupational departments must be established. This curriculum development should have as a central theme the need to nourish the diversity and pluralism of modern life and be flexible enough to cope with unknown future needs and conditions.
   b. People tend to support what they create. Therefore, as a career education program replaces current offerings, in-service training for teachers and administrators to define their new role is essential. Success will be maximized if the training takes place outside of the schools. Keep in mind that there will be voluntary and involuntary staff members in each school. If specific schools can be designated pilot schools, a transfer of voluntary staff to it and involuntary staff from it is encouraged.
   c. Top priority must be given to experimental programs with a career education emphasis such as the Distributive Education team teaching effort at Newark High School. Every effort must be made to allow such programs to have an honest chance for success. Failure should not be built in by pragmatic decisions concerning staffing and scheduling.
   d. Success in a career education program, particularly during the specialization stage, requires real world experience. This will necessitate extensive staff involvement in determining the "real" needs of the world of work. Staff members, therefore, in cooperation with industry must have work release time to participate in business and industrial on site training programs. New staff members, with industrial experience but no teaching experience, must participate in district developed programs designed to acquaint him with the "human," adolescent student.

Year Two - Year Five

Activities after the first year should be extensions of first year events. As experience with the initial plan evolves, opportunities for revision, deletion, and addition of programs based upon student and community needs should be dealt with.

Evaluation of pilot programs developed by district students and staff should occur with appropriate program revisions made..

Two or three additional programs should be selected for total development and implementation each year. This program development should occur according to program goals utilizing the experience gained in pilot program activities.

Identification and cultivation of community resources should be a continuing function in order to provide district teachers a resource document that can optimize the implementation of career education on a K-12 basis.

APPENDIX

AWARENESS PHASE

GOAL: TO DEVELOP EACH CHILD'S SELF AWARENESS.

SUBGOAL: Each person assumes several different roles in relation to the people and situations with which he comes in contact.

UNIT OBJECTIVES	ACTIVITIES	CRITERION REFERENCED OBJECTIVES
1. The child will be able to recognize the multiple roles of one person within the community.	1. Study the role of members of the school community outside the school.	1. Given a list of school personnel and a list of their roles in the school, the child will be able to correctly match the two lists.
2. The child can explain the relationship between his behavior and its effect on others.	2. Make a display of personal property, perhaps a completed project. Relate child's role of those who had a part in its creation (model plane distributor, toy factory employee, inventor, shipping clerk).	2. The child will be able to list 5 people involved in the production and marketing of a specific product.
	3. Make list of class jobs and implement a plan for doing this work.	
	4. Complete a job application. Have someone less objectively determine the childs qualifications and either hire him or turn him down.	

AWARENESS PHASE

GOAL: TO DEVELOP EACH CHILD'S SELF AWARENESS.

SUBGOAL: All people have dignity and are worthwhile.

UNIT OBJECTIVES	ACTIVITIES	CRITERION REFERENCED OBJECTIVES
1. The child will demonstrate ways that he is unique as an individual.	1. Song: "I'm Glad That I Am Me"	1. The child will be able to make a list of 10 things that are unique to the child as an individual.
	2. "Me" button or badge--each child makes button with "Me" on it.	
	3. Picture Book A Book About Me made by drawing pictures to show such things as my home, my best friend, my favorite food, my favorite story, etc.	2. The child will discuss 10 areas, both academic and extracurricular in which he excels.*
	4. Casette story "The Underwater Problem Solvers"	

*N.B. Criterion referenced objectives refer to behavioral objectives on a primary level. Similar objectives could be developed for an intermediate level. DUSO Kit D-2 could be used as a source for these objectives.

EXPLORATION PHASE

GOAL: TO PROVIDE EXPERIENCES FOR STUDENTS TO ASSIST THEM IN EVALUATING THEIR INTERESTS, ABILITIES, VALUES AND NEEDS AS THEY RELATE TO OCCUPATIONAL ROLES.

SUBGOAL: The student will engage in a variety of hands-on experiences--a "creative activity, a designing activity, or a construction activity."

UNIT OBJECTIVES	ACTIVITIES	CRITERION REFERENCED OBJECTIVES
1. The student will participate in role-playing situations in which ethical values are involved.	1. Act out a situation in which you are an applicant from some racial, religious, or ethnic group. You are being interviewed for a job by an employer.	1. Given an employment situation, the student will be able to identify and act out the roles of the employer and the prospective employee.
	2. Act out a situation in which you are an employer who is interviewing applicants from various racial, religious, and ethnic groups.	

EXPLORATION PHASE

GOAL: TO PROVIDE STUDENTS WITH OPPORTUNITIES FOR FURTHER AND MORE DETAILED EXPLORATION OF SELECTED OCCUPATIONAL CLUSTERS, LEADING TO THE TENTATIVE SELECTION OF A PARTICULAR CLUSTER FOR INDEPTH EXPLORATION.

SUBGOAL: The student will recognize national and world-wide careers.

UNIT OBJECTIVES	ACTIVITIES	CRITERION REFERENCED OBJECTIVES
1. The student will list careers that are available in the United States within a specific job cluster.	1. Read the want-ad section of a large, metropolitan newspaper and list the various jobs by country.	1. Given the want-ad section of a large, metropolitan newspaper, the student will list at least six different jobs available within the United States.
2. The student will list careers that are available outside the United States within a specific job cluster.	2. Contact a multinational company and prepare a list of careers which are world-wide. 3. Write to the U.S. Government Printing Office and request information about careers in government, both national and world-wide.	2. Given the want-ad section of a large metropolitan newspaper, the student will list at least six different jobs available outside the United States.

APPENDIX B

DIRECT PROJECT PARTICIPANTS

CURRICULUM DEVELOPMENT FORMAT

CURRICULUM DEVELOPMENT PROGRAM LISTING

DIRECT PROJECT PARTICIPANTS

SCHOOL	1974-75 TEACHERS	1974-75 STUDENTS
Elementary Schools:		
Brookside	9	650 (Est)
Leasure	11	400 (Est)
Wilson	7	400 (Est)
Cobbs	4	200 (Est)
McVey	6	400 (Est)
Maclary	6	400 (Est)
Middle Schools:		
Central	10	620 (Est)
Gauger	13	450 (Est)
Ogletown	19	600 (Est)
Secondary Schools:		
Christiana	5	200 (Est)
Newark	5	40 (Est)
Glasgow	4	1,300 (Est)
TOTAL	99	5,660 (Est)

1

NEWARK SCHOOL DISTRICT CAREER EDUCATION PROJECT

Program Rationale:

To be provided by project staff

To include: Definition of career education and overview of project activities.

2

Program Goals:

To include: Broad phase goals and sub-objectives provided by individual ad hoc committees.

3

Level: ______________________________

Elementary	(K-5)	Awareness
Middle	(6-8)	Exploration
Secondary	(9-12)	Exploration and Specialization

Subject Area: (and grade) ____________

Overview:

Provide a general description of the subject. This should include the needs it is intended to satisfy, the students it is intended to serve, the scope of the subject, and a general description of course content.

4

Level: ______________________________

Subject Area: ________________________

Subject Area Goals: __________________

These are specific course related goals relating in a general way to the desired outcomes. They are broad in scope and statements of program intent.

5

NEWARK SCHOOL DISTRICT CAREER EDUCATION PROJECT

Unit Title: ____________________________

1. Unit Overview:

Subject areas will be subdivided into units of instruction. An overview of each unit should be provided to give teachers and students alike the rationale for the unit and how it fits into the total course offered.

2. Unit Content Outline:

3. Career Information: (optional)

6

Unit Title: ____________________________

Unit Objectives:

Unit objectives are instructional objectives and must be stated in terms of student outcomes (as opposed to goals which are often stated in broad terms). These objectives are more definite in that certain observable behaviors are expected and/or recorded.

7

Unit Objective: ________________________

CRO 1. _ _ _ _ _ _ _ _ _ _ _ _ _

CRO 2. _ _ _ _ _ _ _ _ _ _ _ _ _

Criterion-referenced objectives (CRO) are specific student performance instructional tasks which direct evaluative observations can be made. Several important aspects of criterion-referenced objectives are normally included in thier formulation: The conditions under which the skill/knowledge should be performed; specific demonstrable behavioral tasks which should be performed; and the criteria of acceptability. For axample, mastery, or 80% correct in a given time period, etc.

The objectives are appropriate for short term or daily lesson activities within a unit structure. Often more than one CRO can be incorporated into short term lesson activities.

Learning Activities:

Identify specific activities in which the student is to participate. Comments on the instructional approach, interdisciplinary activities, specific discipline involvement, time requirements, etc., may also be appropriate.

Materials:

Identify support needed in terms of resource people, materials, field trips, equipment, texts, references, etc.

Unit Title: ______________________________

Evaluation:

Where appropriate, each unit should include a pre and post test of unit objectives. Pre and post tests do not have to be of the pencil and paper type. Items such as projects and oral reports are appropriate. The source of pre and post test items should be the unit and criterion-referenced objectives developed for the unit.

CURRICULUM DEVELOPMENT
K-12

PROGRAM TITLE	GRADE LEVELS
Brookside Elementary School:	
Environmental Controls	K-5
Hospitality and Recreational Services	K-5
Local Communication and Transportation	K-5
Marine Occupations	K-5
Nutrition	K-5
Leasure Elementary School:	
Self-Awareness	K
Helpers in the School	K
Foods From Farm to Table	K
Self-Awareness	1
Our Parents as Community Helpers	1
Let's Go to the Zoo	1
How We Get There--Transportation	2
Places to Stay and Eat	2
Getting Ready to Take a Trip	2
Electricity and Magnets	3
Water	3
Photography	3
An Introduction to Nutrition	4
Mountain Regions of the United States	4
Desert Regions of the United States	4

Leasure Elementary School: (continued)

An Interdisciplinary Approach to Mass Production	5
Fine Arts--Art, Music, Theater	5

Cobbs Elementary School:

Jobs Our Parents Do	1-2
"Me"	1-2
Camping	1-5
Rope Jumping	3
Parachute Play	1-5
Exploration of Body Movements	1-5
Physical Fitness	1-5
First Aid	3-5
Team Sports	1-5
Development of Natural Resources: Water, Soil, Minerals, Forestry	4-5
People Manage Their Resources to Satisfy Their Needs and Wants	4-5
Setting up a Business	4-5

McVey Elementary School:

All About Me	K
My Family	K
The World Around Me	K
I Need My Family: My Family Needs Me	1
I Need My School: My School Needs Me	1
I Need My Neighborhood: My Neighborhood Needs Me	1

McVey Elementary School: (continued)

How People Help in the Community	2
The Areas Around Me	2
A Military Community	2
Careers in Delaware	4
Clothing Industry	4
Careers in Other Regions of the United States	4
From the Cave to a City	5
Our Inheritance from the Past: "A Better Man Makes a Better State"	5
Man and Ideas	5
Man Forms Nations and Looks to the West	5
All About Me	Art K-5
All About My Family	Art K-5
The World Around Me	Art K-5
I Need My Family: My Family Needs Me	Art K-5
I Need My School: My School Needs Me	Art K-5
I Need My Neighborhood: My Neighborhood Needs Me	Art K-5
Activity Scroll	Art K-5
How People Help in the Community	Art K-5
The Areas Around Me	Art K-5
Careers in Delaware	Art K-5
Print-Making and Fabric Design	Art K-5
Careers in Other Regions of the United States	Art K-5
Art from Past to the Present	Art K-5
Career Awareness Time Line	Art K-5

Maclary Elementary School:

Learning About Me	K-1
People in the Family	K-1
People Who Work in the School	K-1
People Who Work in the Community	K-1
Foods	2-3
Clothing	2-3
Shelter	2-3
Communication	4-5
Transportation	4-5
Conflict	4-5
Growth of Industry	4-5
Man's Interdependence	4-5
Money, Management and Consumerism	4-5
Communication	4-5
Visual Arts	4-5
Conservation	4-5
Government Social Services	4-5
Construction	4-5
Animal and Pet Care	4-5
Entertainment	4-5
Recreation and Sports	4-5
Health and Safety	4-5

Wilson Elementary School:

Friendly Letters	3
Introduction to Maps and Globes	3
Alaska	3
Listen Right--Do Right	5
Earth in Space--Space Flight	5

Central Middle School:

Exploring Some Ideas About Our Economic System	8
--A Means For Satisfying Human Wants	
--Kinds of Work People Do	
--Getting What We Need	
--Using Government to Solve Worker's Problems	
Special Education	7
--Successful Career Exploration for the Unsuccessful Student	
Money, Money, Money	8
--How Banks Serve You	
Introduction to Biology	7
--The World of Plants	
Photography	7

Gauger Middle School:

Home Economics--Low Ability	7-8
--Happy Homemaker	
Science--Low Ability	7-8
--Heredity and Environment	
--Weather	
--Plants	
Art--Low Ability	7-8
--Self-Awareness	
--Lettering	
--Printing	
--Color	
--Fabric Design	
--Fashion Design	

Gauger Middle School: (continued)

Food Service and Car Service--Low Ability	6-8
Everyday Math-Experimentation--Low Ability	6-8
--Measuring and its Importance in Life	
--Spending Money	
Social Studies--Low Ability	7-8
--Basic Skills Unit	
--Values	
--You as Consumer and Producer	
Language Arts--Low Ability	7-8
--You as Consumer and Producer	

Ogletown Middle School:

Beginning Golf	6-8
Boating Safety and Seamanship--U.S. Coast Guard Auxiliary	6-8
Careers in Government and Politics--1974 Election	6-8
Cartooning	6-8
Christmas Crafts	6-8
Consumer Product Testing	6-8
Creative Stichery	6-8
Ecology in Action	6-8
Fly-Tying and Fishing	6-8
First Aid	6-8
Heroes and Idols	6-8
Heroes and Legends	6-8
Interior Design	6-8

Ogletown Middle School: (continued)

Knowing Myself	6-8
Mini-Opportunities--Self-Help Work Program	6-8
Musicians Who Teach	6-8
Newspaper Arts and Crafts	6-8
Newspaper Elective	6-8
Oceanography	6-8
Personal Health	6-8
Principles of Flight	6-8
Puppetry	6-8
Recreation in America	6-8
Restaurant Operation	6-8
Selling Yourself	6-8
Short Story Writing for Children	6-8
Sign Language	6-8
Signing	6-8
Techniques of Basketball Officiating	6-8
The Automobile Mechanic	6-8
The Statistician in Sports	6-8
They Sell Music	6-8
U.S. Coast Guard Auxiliary	6-8
U.S. History and Government	6-8
Ways With Plants	6-8
Who Am I and What Can I Do About It	6-8
Wildlife Conservation	6-8
Writing for Fun and Profit	6-8

Christiana High School:

Business Communications I	9
--Career Preparation	
--Parts of Speech	
--Phrase-Clause-Sentence	
--Vocabulary and Spelling	
--Punctuation	
--Literature	

Glasgow High School:

Careers Clubs	10-12
Exploration of Professional Careers	10-12
Exploration of Post Secondary Schools	10-12
Observations of Professional Careers	10-12
Career Self Evaluation	10-12

Newark High School:

Applied Marketing Research: Orientation to Creative Marketing Project	10-11
Classification	10-11
Comparing Volumes of Odd Shaped Objects	10-11
D.E. and Animal and Plant Life (Forestry)	10-11
D.E. and Animal and Plant Life (Science)	10-11
D.E. and Energy	10-11
D.E. and Energy (Science)	10-11
D.E. and Fresh Water	10-11
D.E. and Fresh Water (Science)	10-11
D.E. and Natural Resources	10-11

Newark High School: (continued)

D.E. and the Ocean (Ocean Transportation)	10-11
D.E. and the Ocean (Science)	10-11
D.E. and Weather	10-11
D.E. and Weather (Science)	10-11
Genetics	10-11
Graphs	10-11
Interaction of Government and Marketing	10-11
International Marketing	10-11
Introduction to Reproduction	10-11
Introduction to Resources	10-11
Measurement	10-11
Methods of Gathering Primary Data-- Creative Marketing Project	10-11
Observation	10-11
Our Free Enterprise Economy	10-11
Role of Community Resources in Marketing	10-11
Starting a Business	10-11
Using a Microscope	10-11

APPENDIX C

SOUND SLIDE SCRIPT

CAREER EDUCATION SOUND SLIDE PRESENTATION
NEWARK SCHOOL DISTRICT

(1) BLACK SLIDE. (2) TINKER, TAILOR, SOLDIER, SAILOR. (3) RICH MAN, POOR MAN, BEGGAR MAN, THIEF. DOCTOR, LAWYER, (4) MERCHANT, THIEF.

WHO DOESN'T FONDLY REMEMBER THE OLD CHILDRENS' RHYME WHICH HELPED IDENTIFY THE VARIOUS LIFE STYLES OF GROWNUPS?

UNFORTUNATELY, EXPOSURE TO NURSERY RHYMES WAS ABOUT AS FAR AS CAREER EDUCATION WENT FOR MILLIONS OF AMERICAN CHILDREN IN YEARS PAST. WHAT THEIR FATHERS, BROTHERS, SISTERS OR UNCLES DID (5) FOR A LIVING, THE BRIEF CONTACT THEY HAD WITH THE POSTMAN, FIREMAN, (6) TEACHER OR THE NURSE DID VERY LITTLE TO MAKE AMERICAN CHILDREN AWARE OF THE MANY POSSIBILITIES FOR MEANINGFUL WORK AVAILABLE TO THEM. (7)

BUT FOR TOO LONG, THE AMERICAN EDUCATIONAL SYSTEM SHUFFLED CHILDREN THROUGH THE SEEMINGLY LABRYNTH CORRIDORS OF OUR SCHOOL, ONLY TO TURN THEM OUT SOMEWHERE ALONG THE LINE WOEFULLY (8) IGNORANT OF THE REALITIES OF EARNING A LIVING IN A SATISFYING AND REWARDING MANNER.

(9) CONSIDER ALSO, THAT EACH YEAR SOME TWO POINT FIVE MILLION CHILDREN LEAVE THE FORMAL EDUCATION SYSTEM WITH LITTLE OR NO PREPARATION FOR A CAREER.

(10) THESE YOUNG PEOPLE ENTER A WORLD WHERE COMPETITION FOR INCREASINGLY SOPHISTICATED JOBS IS EVER MORE INTENSE.

THE PROBLEM IS MORE THAN EVIDENT..IT FAIRLY SCREAMS FOR CORRECTION. (11) BUT WHAT CAN BE DONE ABOUT IT...AND HOW? (12)

(13) THE NEWARK SCHOOL DISTRICT, THROUGH A COOPERATIVE EFFORT AT THE LOCAL, STATE AND FEDERAL LEVELS, HAS UNDERTAKEN A PROGRAM TO ATTEMPT TO CORRECT THE SITUATION WE JUST DESCRIBED.

ITS (14) PHILOSOPHY STATES: "CAREER EDUCATION IS A COMPREHENSIVE EDUCATION GOAL, DESIGNED TO PROVIDE ALL YOUTH WITH THE OPPORTUNITY FOR CAREER AWARENESS, AND THE OPPORTUNITY TO OBTAIN SKILLS NECESSARY TO ACHIEVE ECONOMIC INDEPENDENCE AND AN APPRECIATION OF WORK.

NOW, LET'S (15) GO OVER THAT AGAIN. CAREER EDUCATION IS A COMPREHENSIVE EDUCATIONAL GOAL, DESIGNED TO PROVIDE ALL YOUTH WITH THE OPPORTUNITY FOR CAREER AWARENESS, AND THE OPPORTUNITY TO OBTAIN SKILLS NECESSARY TO ACHIEVE ECONOMIC INDEPENDENCE AND AN APPRECIATION OF WORK.

NOW, LET'S (15) GO OVER THAT AGAIN. CAREER EDUCATION IS A COMPREHENSIVE EDUCATIONAL GOAL, DESIGNED TO PROVIDE ALL YOUTH... THE OPPORTUNITY FOR CAREER AWARENESS...AND THE OPPORTUNITY TO OBTAIN SKILLS NECESSARY TO ACHIEVE ECONOMIC INDEPENDENCE AND AN APPRECIATION OF WORK.

ENLARGED SOMEWHAT, THIS MEANS EDUCATIONAL EXPERIENCES...CURRICULUM, INSTRUCTION AND COUNSELING (16)...SHOULD INVOLVE PREPARATION FOR ECONOMIC INDEPENDENCE, PERSONAL FULFILLMENT AND AN APPRECIATION OF THE DIGNITY OF WORK. UNDER CAREER EDUCATION AT NEWARK, EVERY STUDENT (17) CAN LEAVE THE SCHOOL SYSTEM WITH A SALABLE SKILL... A MINIMUM ENTRY-LEVEL JOB SKILL IF HE LEAVES AT OR BEFORE THE END OF HIGH SCHOOL, AND A MORE ADVANCED SKILL IF HE CONTINUES HIS EDUCATION IN A TECHNICAL OR VOCATIONAL INSTITUTION.

AT NEWARK, (18) A PLAN HAS BEEN DEVELOPED TO INCORPORATE A PROGRAM OF CAREER EDUCATION--INCLUDING BOTH VOCATIONAL AND ACADEMIC COURSES--AT ALL LEVELS...KINDERGARTEN THROUGH TWELFTH GRADE. (19) THIS PLAN, FUNDED BY THE U.S. OFFICE OF EDUCATION, GREW OUT OF A PILOT PROJECT AT THE SECONDARY LEVEL WHICH OPERATED IN SEVEN DELAWARE SCHOOL DISTRICTS AND AT THE DELAWARE TECHNICAL AND COMMUNITY COLLEGE, DURING 1971-72. (20)

FIRST IS THE AWARENESS PHASE--KINDERGARTEN THROUGH FIFTH GRADE. HERE CHILDREN ARE (21) TAUGHT TO DEVELOP POSITIVE ATTITUDES ABOUT THE PERSONAL AND SOCIAL SIGNIFICANCE OF WORK, TO DEVELOP SELF-AWARENESS, TO DEVELOP OCCUPATIONAL AWARENESS AND ASPIRATIONS AND TO IMPROVE CLASSROOM PERFORMANCE. (22)

THE SECOND PHASE COVERS CHILDREN IN GRADES SIX THROUGH EIGHT... THE MIDDLE SCHOOL LEVEL. THIS IS CALLED THE EXPLORATORY PHASE. (23) NOW HERE CHILDREN UNDERGO A VARIETY OF EXPERIENCES DESIGNED TO ASSIST THEM IN EVALUATING THEIR INTERESTS, ABILITIES, VALUES AND NEEDS AS THEY RELATE TO CAREER GOALS. AT THIS LEVEL THEY ARE ALSO ENCOURAGED MORE FULLY TO EXPLORE VARIOUS CAREER CLUSTERS, LEADING TO THE TENTATIVE SELECTION OF A SINGLE CAREER CLUSTER FOR IN-DEPTH STUDY. (WE'LL EXPLAIN THE TERM CAREER CLUSTERS IN JUST A MINUTE) FINALLY, IT IS HOPED THAT STUDENTS WILL IMPROVE THEIR PERFORMANCE IN BASIC SUBJECT AREAS BECAUSE THE SUBJECT MATTER WILL HAVE TAKEN ON NEW MEANING AND RELEVANCE. (24)

THE THIRD PHASE IS THE HIGH SCHOOL LEVEL, GRADES NINE THROUGH TWELVE. AT THIS STAGE EXPLORATION CONTINUES AND BECOMES (25) MORE SPECIALIZED. STUDENTS BEGIN TO NARROW THEIR CAREER OPTIONS BY

SELECTING AT LEAST ONE CAREER AREA AND MAKING AN IN-DEPTH STUDY OF IT. THEIR TRAINING FOCUSES ON THE REQUIREMENTS OF SPECIFIC CAREER GROUP AREAS. AT THE SAME TIME, THE STUDENT IN NOT OBLIGATED TO STAY WITHIN THE CAREER AREA AND CAN ELECT TO MOVE TO ANOTHER IF HIS EXPERIENCES LEAD HIM OR HER TO THAT CHOICE.

STUDENTS IMPROVE IN THEIR BASIC SUBJECT AREAS BECAUSE THEY CAN SEE THE TIES TO THE CAREERS THEY'RE EXPLORING. (26)

STUDENTS ALSO RECEIVE INTENSIVE CAREER GUIDANCE COUNSELING GEARED TO HELP THEM SELECT A CAREER OCCUPATIONAL SPECIALTY. THIS OCCURS WHETHER THE STUDENT FINISHES FORMAL EDUCATION AT THE HIGH SCHOOL LEVEL, WILL CONSIDER SOME POST SECONDARY EDUCATION OR CHOOSES A FOUR-YEAR COLLEGE PROGRAM. (27)

PLACEMENT BECOMES AN IMPORTANT FACET OF THE CAREER EDUCATION PROGRAM IN THE FINAL TWO YEARS OF THE THIRD PHASE--EXPLORATION AND SPECIALIZATION. (28) REGARDLESS OF THE DIRECTION IN WHICH THE STUDENT IS HEADED, HE OR SHE WILL RECEIVE FULL ASSISTANCE IN PLACEMENT.

PERHAPS NOW WOULD BE AN APPROPRIATE POINT (29) TO EXPLAIN THE CAREER CLUSTER CONCEPT. IN THE EARLY STAGES OF THE PROGRAM, EACH STUDENT IS INTRODUCED NOT TO A SPECIFIC JOB CONCEPT, BUT TO WHAT IS KNOWN AS A CAREER CLUSTER. (30) THIS SIMPLY MEANS A NUMBER OF RELATED ACTIVITIES IN ONE BROAD FIELD. SOME FIFTEEN CLUSTERS HAVE BEEN IDENTIFIED BY THE U.S. OFFICE OF EDUCATION.

AMONG (31) THEM ARE: TRANSPORTATION, COMMUNICATIONS, BUSINESS AND OFFICE, PERSONAL SERVICES, AGRICULTURE AND NATURAL RESOURCES, MANUFACTURING, AND FINE ARTS AND THE HUMANITIES.

EXPLORING EACH OF THE 15 CLUSTERS, THE STUDENT BECOMES AWARE OF A WIDE RANGE OF (32) CAREERS. FOR INSTANCE, UNDER TRANSPORTATION, HE IS INTRODUCED TO (33) SUCH DIVERSE AREAS AS AEROSPACE, TRUCKING, RAIL, PIPELINE AND WATER TRANSPORTATION. HE IS MADE AWARE OF THE MYRIAD JOBS IN EACH (34) CATEGORY--TRUCK DRIVER...(35) SHIP'S HAND...(36) RAILROAD CONDUCTOR (37) FLIGHT ENGINEER--AND HOW THEY INTERRELATE.

ONCE A STUDENT HAS IDENTIFIED A CAREER (38) CLUSTER HE IS EXPOSED TO THE VARIOUS PERSONAL, EDUCATIONAL, ECONOMIC AND SOCIAL REQUIREMENTS. THE STUDENT THEN MATCHES THESE WITH HIS OR HER INTERESTS, ABILITIES AND APTITUDES TO DETERMINE THOSE AREAS IN WHICH THE STUDENT WOULD BE LIKELY TO HAVE THE GREATEST CHANCE OF SUCCESS.

SOUND GOOD? IT IS GOOD! THE PROGRAM IS SOUND. NOT ONLY IN ITS PLANNING AND EXECUTION, (39) BUT EQUALLY IMPORTANTLY, IN THE WAY IT INTERFACES WITH THE COMMUNITY.

SIMPLE AS IT IS, THE PROGRAM JUST WON'T WORK BY ITSELF. IT WON'T JUST HAPPEN. THERE HAS TO BE UNDERSTANDING AND SUPPORT (40) ON THE PART OF PUPILS, PARENTS, EDUCATORS AT ALL LEVELS, (41) BUSINESSMEN AND WOMEN, LABOR LEADERS AND PUBLIC OFFICIALS--THE MOVERS AND THE SHAKERS, THE OPINION LEADERS OF EACH COMMUNITY.

(42) MRS. MYRTLE BOWE, EXECUTIVE VICE-PRESIDENT, THE GREATER NEWARK CHAMBER OF COMMERCE.

"THE CAREER EDUCATION MOVEMENT CANNOT SUCCEED IF IT IS ATTEMPTED ONLY WITHIN THE INDIVIDUAL TEACHER'S CLASSROOM. SUCCESS OF THIS CONCEPT DEPENDS UPON THE ACTIVE INVOLVEMENT OF THE BUSINESS-LABOR-INDUSTRY COMMUNITY. THIS COMMUNITY MUST BE ACTIVE IN THE ESTABLISHMENT

OF CAREER PROGRAMS, SUPPORTING EXISTING PROGRAMS, AND PROVIDING ASSISTANCE AND LEADERSHIP IN POLICYMAKING FOR CAREER PROGRAMS.

THE SCHOOL IS PART OF THE COMMUNITY. CAREER PREPARATION IS A MAJOR SCHOOL FUNCTION. CAREER AWARENESS AND EXPLORATION ACTIVITIES MUST PROVIDE FOR STUDENT INVOLVEMENT WITHIN THE TOTAL COMMUNITY THROUGH EXPERIENCES SUCH AS FIELD TRIPS, RESOURCE PEOPLE, COOPERATIVE WORK EXPERIENCE AND JOB PLACEMENT.

PREPARING STUDENTS TO MEET THE DEMANDS OF A CHANGING SOCIETY IS NOT ONLY THE RESPONSIBILITY OF EDUCATION, BUT ALSO OUR RESPONSIBILITY: BUSINESS, INDUSTRY AND LABOR."

THE PROGRAM WILL REQUIRE LEADERSHIP AND FUNDING (43) AT THE STATE AND FEDERAL LEVELS. IT WILL REQUIRE MUCH MORE AT THE LOCAL LEVEL. HERE REFINEMENT IS NECESSARY TO MAKE THE CONCEPT FIT (44) THE LOCAL NEEDS AND REALITIES. THE NEEDS OF A LARGE URBAN COMMUNITY OBVIOUSLY DIFFER (45) FROM THOSE OF A SMALLER, SEMI-RURAL COMMUNITY. THESE NEEDS MUST BE REFLECTED IN THE CAREER EDUCATION PROGRAM.

TO HELP MAKE CAREER EDUCATION WORK IN THE NEWARK SCHOOL DISTRICT, TWO DISTINCT MOVES HAVE BEEN MADE TO DEVELOP COMMUNITY INVOLVEMENT. (46)

OKAY, THE FIRST IS THE FORMATION OF A CAREER EDUCATION ADVISORY COUNCIL, CONSISTING OF PARENTS, EDUCATORS AND REPRESENTATIVES OF BUSINESS AND INDUSTRY.

THE ADVISORY COUNCIL, IN TURN, (47) HAS CREATED THREE TASK FORCES, ONE REPRESENTING EACH OF THE THREE PHASES OF THE PROGRAM... AWARENESS, KINDERGARTEN THROUGH GRADE FIVE...EXPLORATION, GRADE

SIX THROUGH EIGHT...AND EXPLORATION AND SPECIALIZATION, GRADES NINE THROUGH TWELVE. WHILE IT IS THE ON-GOING RESPONSIBILITY OF THE ADVISORY COUNCIL TO PROVIDE OVERALL DIRECTION FOR CAREER EDUCATION PROGRAMS, (48) THE THREE TASK FORCES, WHICH EXISTED ON A TEMPORARY BASIS, WERE RESPONSIBLE FOR DEVELOPING GOALS FOR THE CAREER EDUCATION PHASE THEY REPRESENTED.

IN ADDITION, (49) EACH TASK FORCE WAS RESPONSIBLE FOR RESOURCE IDENTIFICATION, DESIGN OF A SYSTEM AND RECOMMENDATIONS FOR IMPLEMENTATION AND EVALUATION. NOW, WITH THIS APPROACH, THERE IS A CONSTANT MONITORING OF EACH PHASE BY THE ADVISORY COUNCIL AND MODELS CAN BE CONSTRUCTED AND MODIFIED AS APPROPRIATE. AS A NEW CONCEPT, CAREER EDUCATION (50) HAS BEEN WIDELY ENDORSED. IRVING S. SHAPIRO, CHAIRMAN, E.I. DUPONT COMPANY.

"COMPANIES LIKE DUPONT DEPEND UPON EMPLOYEES WITH A WIDE VARIETY OF SKILLS AND TRAINING TO PERFORM THE COMPLEXT TASKS INVOLVED IN PRODUCING PRODUCTS, MAKING THEM BETTER, OR INVENTING NEW ONES. A DUPONT EMPLOYEE WILL, IN MOST CASES, GET TRAINING UPON JOINING THE COMPANY AS WELL AS OPPORTUNITIES FOR FURTHER TRAINING AND ADVANCEMENT. WE LOOK FOR PEOPLE WITH THE ABILITY TO THINK AND PERFORM AS INDIVIDUALS AS WELL AS MEMBERS OF A GROUP. AND WE LOOK FOR PEOPLE WHOSE RECORDS SHOW THEY HAVE THE BASIC SKILLS TO DO A JOB. APPLICANTS SOMETIMES HAVE BEEN TURNED DOWN BECAUSE THEY HAVE NOT ACQUIRED BASIC COMMUNICATIONS OR MATH SKILLS. AN INSTRUMENT MECHANIC, FOR INSTANCE, MAY NOT HAVE BASIC MATH. IF HE HAD IDENTIFIED IN SCHOOL AN INTEREST IN A TECHNICAL OR MECHANICAL AREA, PERHPAS HE MIGHT HAVE TAKEN A GREATER INTEREST IN MATH COURSES. WE HAVE FOUND, TOO, THAT SOME EMPLOYEES

JUST OUT OF SCHOOL DO NOT MAKE THE GRADE IN INDUSTRY BECAUSE THEY DO NOT UNDERSTAND THAT A JOB MUST BE PERFORMED ON TIME AND IN ACCORDINACE WITH ASSIGNED EXPECTATIONS. THE DIFFERENCE BETWEEN LEVELS OF EXPECTED PERFORMANCE IN SCHOOL AND INDUSTRY IS A SURPRISE TO THEM. THUS, WE ARE INTENSELY INTERESTED IN CAREER EDUCATION AS A POTENTIAL MEANS OF MOTIVATING YOUNG PEOPLE TO IMPROVE THE BASIC SKILLS THEY WILL NEED LATER AS WELL AS HELPING THEM MAKE BETTER CAREER DECISIONS."

ENDORSEMENT IS ONE THING, GETTING A PROGRAM INTO OPERATION IS ANOTHER, (51) REQUIRING CONSIDERABLE ORGANIZATION AND EFFORT.

WHEN THE PROGRAM FIRST BEGAN IN DELAWARE, INDIVIDUAL PILOT PROGRAMS WERE INITIATED THROUGHOUT THE STATE. AS A RESULT OF THESE INITIAL EFFORTS--IN WHICH NEWARK PARTICIPATED--THE NEWARK SCHOOL DISTRICT APPLIED FOR AND RECEIVED A GRANT TO DEVELOP A FULL-SCALE PROGRAM FROM KINDERGARTEN THROUGH TWELFTH GRADE.

(52) ENOUGH FOR BACKGROUND AND THEORY. HOW DOES THE PROGRAM WORK ON A PRACTICAL BASIS? (53)

LET'S LOOK FIRST AT THE ELEMENTARY LEVEL. A NUMBER OF DIFFERENT PROGRAMS ARE EMPLOYED HERE. TWO EXAMPLES WOULD BE THOSE AT THE WILSON AND BROOKSIDE SCHOOLS. (54) AT WILSON, THE PROGRAM PARALLELS THE WELL-KNOWN JUNIOR ACHIEVEMENT PROGRAM. THAT IS, (55) A CLASS IS ORGANIZED INTO A SMALL CORPORATION, STOCK IS ISSUED AND SOLD, A PRODUCT IS IDENTIFIED, MANUFACTURED AND SOLD AND, A PROFIT OR LOSS IS REALIZED. THE CHILDREN LEARN THE BASIC CONCEPTS OF THE WORLD OF BUSINESS BY TAKING ROLES AS COMPANY PRESIDENT, A SALESMAN OR WOMAN, PRODUCTION WORKER AND SO ON. (56)

AT THE BROOKSIDE ELEMENTARY SCHOOL, ANOTHER APPROACH IS TAKEN. HERE THE FOCUS IS ON PROVIDING EXPERIENCES (57) WHICH DEAL WITH TOOLS, MATERIALS, MACHINES AND PROCESSES. THIS ACTIVITY ACQUAINTS THE STUDENTS WITH TODAY'S TECHNOLOGY AND HOW IT FITS INTO OUR LIVES. BOTH THESE APPROACHES HAVE RECEIVED NATIONAL RECOGNITION. (58)

NOW LET'S LOOK AT HOW THE PROGRAM WORKS AT THE MIDDLE SCHOOL LEVEL. REMEMBER, THIS THE EXPLORATION PHASE. (59)

AT THE CENTRAL SCHOOL, THE PROGRAM CYCLES STUDENTS THROUGH EXPERIENCES WHICH INVOLVE...EXPLORATION OF PRODUCTION OCCUPATIONS (60) THROUGH INDUSTRIAL ARTS AND (61) HOME ECONOMICS...EXPLORATION OF SERVICE OCCUPATIONS THROUGH THE RESOURCE CENTER (62) AND THE SCHOOL NURSE...AND INTEGRATED (63) ACADEMIC DISCIPLINE.

IN CONTRAST, (64) THE OGLETOWN SCHOOL PROJECT INVOLVES THE ENTIRE STAFF AND STUDENT BODY IN CAREER EXPLORATION ON A DAILY BASIS OVER 50 CAREER (65) ELECTIVES ARE PROVIDED FOR STUDENTS. FROM THESE, THE STUDENT SELECTS VARIED CAREER EXPERIENCES FOR A CONCENTRATED EXPOSURE. STUDENTS ARE GIVEN AN OPPORTUNITY TO SELECT A NEW CAREER ELECTIVE EVERY SIX WEEKS OR SO.

(66) AT THE SECONDARY OR HIGH SCHOOL LEVEL, THE STORY IS SOMEWHAT DIFFERENT. HERE STUDENTS TRADITIONALLY HAVE BEEN DIVIDED (67) INTO GENERAL...(68) ACADEMIC...(69) OR VOCATIONAL CATEGORIES. THIS APPROACH HAS BEEN FOUND WANTING IN SOME AREAS.

SO, AT NEWARK, NEW CAREER PROGRAMS ARE CONSTANTLY BEING DEVELOPED WHICH INVOLVE BOTH A BLENDING AND A RESTRUCTURING OF ACADEMIC AND VOCATIONAL COURSES TO CREATE A NEW CURRICULA EMPHASIS.

FOR EXAMPLE, (70) THE DISTRIBUTIVE EDUCATION PROGRAM BEING DEVELOPED AT NEWARK HIGH SCHOOL IS AN EXCELLENT EXAMPLE OF HOW (71) A CAREER RELATED PROGRAM CAN BE BLENDED WITH SUPPORTIVE ACADEMIC PROGRAMS. (72)

HERE THE PROGRAM FOCUSES ON STUDENT ACTIVITIES. IT IS PRESENTED COOPERATIVELY BY A TEAM OF FIVE TEACHERS REPRESENTING MARKETING AND DISTRIBUTION, (73) ENGLISH, MATHEMATICS, SOCIAL STUDIES AND SCIENCE. THIS APPROACH MAKES IT MUCH EASIER FOR THE STUDENT TO UNDERSTAND THE MEANING AND RELEVANCE OF SUBJECTS TO THE CAREER FIELD. (74)

ONE HIGHLY IMPORTANT ASPECT OF THE CAREER EDUCATION PROGRAM IS THE FLIXIBILITY IT OFFERS. OPTIONS CAN BE EXPLORED AT ANY TIME (75) AND ALTERNATIVES ARE AVAILABLE TO STUDENTS AT EACH LEVEL. IT (76) ALSO IS POSSIBLE FOR STUDENTS TO SWITCH PROGRAMS AT VARIOUS POINTS DURING THE YEAR IN PHASES TWO AND THREE.

SO, THE NEED (77) HAS BEEN ESTABLISHED. NEARLY TWO POINT FIVE MILLION STUDENTS LEAVE THE FORMAL EDUCATIONAL SYSTEM EACH YEAR WITHOUT ADEQUATE PREPARATION FOR CAREERS.

CAREER (78) EDUCATION OFFERS A SOLUTION TO THIS PROBLEM. THE GOAL OF THE PROJECT IS TO PROVIDE THE STUDENT WITH THE OPPORTUNITY TO SYSTEMATICALLY STUDY CAREER CLUSTERS AS HE PROCEEDS UP THAT LATTER FROM KINDERGARTEN THROUGH GRADE TWELVE.

THE COMMITMENT OF THE STATE OF DELAWARE TO CAREER EDUCATION WAS (79) EMPHASIZED BY GOVERNOR SHERMAN TRIBBITT WHEN HE STATED:

"A CHALLENGE LIES BEFORE US. THIS CHALLENGE IS TO MAKE EDUCATION RESPONSIVE AND RELEVANT TO OUR NEEDS AS A COMMUNITY, AS A

STATE AND AS A NATION. IT IS MY BELIEF THAT WITH THE TOTAL IMPLEMENTATION OF THE CAREER EDUCATION CONCEPT, A MORE MEANINGFUL LEARNING ATMOSPHERE IN THE CLASSROOMS OF DELAWARE WILL DEVELOP. CAREER EDUCATION PROPERLY INITIATED AND ADMINISTERED OFFERS THE BEST HOPE OF SERVING THE NEEDS OF ALL OUR CHILDREN IN THE PUBLIC SCHOOLS. IT IS IMPERATIVE THAT CAREER EDUCATION IMPLEMENTATION EFFORTS, SUCH AS THOSE OCCURRING IN THE NEWARK SCHOOL DISTRICT, BE IMPLEMENTED THROUGHOUT DELAWARE. THE TIME FOR CAREER EDUCATION IS NOW!"

(80) PRESENTLY THE CONCEPT OF CAREER EDUCATION CAN BE SAID TO BE IN A DEVELOPING STAGE. THE SPECIFIC MEANS FOR IMPLEMENTING THIS CONCEPT IN AMERICAN EDUCATION ON A BROAD SCALE REMAIN LARGELY UNDEVELOPED. (81) THE COURSES OF ACTION TAKEN THUS FAR ARE ONLY A BEGINNING. THE TOTAL AMERICAN PUBLIC MUST NOW DECIDE (82) THE SCOPE OF THEIR ENDORSEMENT AND PROVIDE SUPPORT FOR ITS IMPLEMENTATION.

(83) "TINKER, TAILOR, SOLDIER, SAILOR. RICH MAN, POOR MAN, BEGGAR MAN, THIEF. DOCTOR, LAWYER, (84) MERCHANT, CHIEF..."

APPENDIX D

CAREER EDUCATION ADVISORY COUNCIL

CAREER EDUCATION ADVISORY COUNCIL MEMBERS

Mrs. Myrtle Bowe	Executive Vice-President Greater Newark Chamber of Commerce 250 East Main Street Newark, DE 19711 737-4343
Mr. Gerald Cavall	Teacher Brookside Elementary School Marrows Road Newark, DE 19711 731-2104
Mr. Thomas Comer	Associate Principal Glasgow High School 1901 South College Avenue Newark, DE 19711 731-2391
Mr. Anthony Cottone	Coordinator, Newark School District Career Education Project Newark High School East Delaware Avenue Newark, DE 19711 731-2328
Dr. Hugh Ferguson	Principal Central Middle School Academy Street Newark, DE 19711 731-2115
Mr. H. Nelson Freidly, Jr. CHAIRMAN	Director of Secondary Education Newark School District 83 East Main Street Newark, DE 19711 731-2450
Mr. Frank Higgins	Supervisor of Occupational Education Newark School District 83 East Main Street Newark, DE 19711 731-2228

Mr. Fal Jones	Recreation Supervisor New Castle County Parks & Recreation Recreation Division 3300 Faulkland Road Wilmington, DE 571-7720
Dr. John Matthews	Director of Occupational Technical Education & Consortium Director University of Delaware Newark, DE 19711 738-2315
Mrs. Emily McGlinchey	Teacher Etta J. Wilson School Forge Road Newark, DE 19711 731-2180
Mr. W. Carl Moran	Manager, Exempt Employee Relations Employee Relations Section DuPont Company Nemours Building 13470 Wilmington, DE 19810 774-5784
Mr. Richard Nelson	Industrial Engineer DuPont Company Vice President - Junior Achievement of Delaware 20 Ferncliff Road (home) Newark, DE 19711 774-9005
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